Communications Research Centre

MEASUREMENTS OF UHF RADIO PROPAGATION ON THE BAFFIN AND LABRADOR COASTS (U)

by

Claude Bilodeau

The propagation experiment was sponsored by the Project Manager of North American Air Defence Modernization Project (PM-NAADM) of the Department of National Defence.

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DEPARTMENT OF COMMUNICATIONS
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(Radio Networks)

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ABSTRACT

The signal strengths received across five UHF paths in the Frobisher Bay and Resolution Island area were monitored for 15 months. All paths were over sea, with lengths in the range 90 to 182 km. Detailed monthly summaries of day-to-day fade depth and distribution are presented and analyzed. Comparisons with Rayleigh and Gauss distributions are made. Reflection, diffraction, ducting/ shadowing, tidal effects, and diurnal variation were all observed on at least one path. The climatic conditions in the region are reviewed.

1. INTRODUCTION

With advancements in telecommunication technology, and the ever-increasing congestion of the HF spectrum, point-to-point radio links via standalone repeater stations are becoming attractive. Historically, technological development has favoured the generation of HF radio waves - equipment designed for higher frequencies was avoided because of its inherent technical complexity. HF waves have the property of reflection by the ionosphere hence of traveling very long distances. This is another reason why they were and are still widely used. However, for modern digital telecommunications, HF has serious drawbacks. Multipath propagation caused by multiple ionospheric reflections and noise due to solar flare emissions create a hostile environment in which digital transmissions have difficulty in relaying error-free messages. Today's HF state-of-the-art technology achieves a relatively low transmission rate of 2400 baud for only 90% of time reliability.

For the hungry world of digital communications, faster rates, more bandwidth and higher degree of reliability are often required. The use of

higher frequencies, such as VHF and UHF, offers significant improvement in these areas. That part of the spectrum is not affected by sun related phenomena. The atmospheric noise is also low and this eases the detection of weak signals.

Recognizing the importance of VHF/UHF as a key element in point-to-point radio communication developments, the Communications Research Centre (CRC), of the federal Department of Communications in Ottawa, has conducted over the last decade several propagation experiments in these bands. Results of early work were reported by Palmer [1979, 1980]. Work under military contracts was undertaken later at Eureka and Alert (N.W.T.) but reports were reserved for internal use only [Strickland, 1981]. More recently, publications by Butler [1985], and Whitteker [1985], contain extensive information on VHF/UHF propagation characteristics for two very different climatic regions: the harsh, desert climate of the central Arctic and the more temperate, rainy climate of the Maritimes. Butler's report in particular, demonstrated that ship to shore reliable VHF communications could be provided anywhere in the Northwest Passage using a chain of UHF repeaters along the coastline. In 1984/85, another set of measurements was undertaken in the Lancaster Sound area, east of Resolute Bay (N.W.T), but data analysis of that experiment has been deferred. Finally, the most recent experiment of the series started in September 1986 and lasted over a year, in the Hudson Strait area. The findings are the object of this report. Altogether, data from no less than three dozen radio links have been collected during the past ten years or so.

Most of the measurements mentioned above have taken place in the sparsely populated and remote Northern areas of Canada, since, little was known about propagation characteristics in these regions.

Even though the use of VHF/UHF frequencies offers interesting possibilities, it is bound by one principal disadvantage: moving up from HF frequencies means that each transmission must be kept within about the horizon or line of sight distance. Failure to do so would cause the radio beam to be diffracted or even blocked by the normal earth curvature since the wave tends to travel in a straight line. Also, unlike HF, the shorter waves are not reflected by the ionosphere. Therefore, path length plays an important role in optimizing the VHF/UHF link performance. This report describes the results of an experiment conducted within the 450-470 MHz frequency band on five long paths, of which four exceed 100 km.

Besides the propagation considerations, the experiment was interesting in two other respects: it allowed the study of some climatological data peculiar to this remote region and it put the equipment to a severe environmental test. Since repeater sites may be located in isolated areas, the design of efficient standalone repeaters, powered by solar or chemical cells, becomes a major element of success or failure in implementing this type of communication system. These two aspects of the experiment will be discussed before the propagation analysis is presented.

2. DESCRIPTION OF THE EXPERIMENT

The main purpose of the experiment was to measure the signal strength received at UHF over a number of paths for at least a year in order to assess propagation conditions in the Hudson Strait area. Sites were chosen to provide a series of clear paths extending south-east of Iqaluit.

Figure 1 shows the propagation paths and sites, which were named arbitrarily according to the nearest predominant geographical landmark. The path profiles are shown in Figure 2 assuming 4/3 earth curvature. The paths are 98% or more located above sea water and are line-of-sight, except Kakkiviak-Warwick which is blocked by the sea surface.

Site coordinates and elevation, transmitter frequency and antenna polarization are given in Table 1. The frequencies used were in the 450-470 MHz band, and were nearly the same as those used previously in the Lancaster Sound area. The antenna polarizations were alternated on adjacent paths to minimize antenna coupling at a station.

Table 1. Site coordinates and elevation (above mean sea level), frequency of transmission and antenna polarization.

SITE NAME	MAIN LAND	LAT. (north)	LONG. (west)	ELEV. (m)	FREQ. (MHz)	POL.
Cape Kakkiviak	Northern Labrador	59°59'	64°10'	551	460.0	Horiz.
Lacy Island Horiz.	Northern Labrador	60°41'	64°35'	238	465.0	
Cape Warwick	Resolution Is.	61°36'	64°38'	364	452.5	Vert.
Cape Cracroft Horiz.	Baffin Is.	62°44'	65°18'	427	466.0	
Cape Vanderbilt	Baffin Is.	63°04'	67°39'	518	450.3	Vert.
Iqaluit	Baffin Is.	63°45'	68°32'	30	-	-

At each remote site (see Figure 1), a transmission of constant power was directed northward toward the receiving site, where periodic measurements were made of the field strength. Since the sites were located in unattended areas, all measurements were relayed to the next site until they finally reached the base station in Iqaluit where they were recorded automatically.

The relay of the measurements was carried out by modulating the radio signal to be measured. Passing the information this way avoided the use of a parallel radio system. The measurement bandwidth was kept larger than the transmitted bandwidth so the modulation process would not affect the results. Of concern was the serial nature of the transmissions... as lights in a Christmas tree, when one goes the whole lighting set goes. First, the design left enough signal margin on each path to accommodate fairly deep fades. In fact, only three times in the whole recording period were a few seconds of data lost due to this problem. Second, the equipment was designed for high reliability of operation. Unfortunately, even though the electronics never failed, the external RF cable assemblies were damaged by strong blizzards during the recording period. A few weeks of data were lost due to this reason until repairs were made. Specific details are given in section 4.

On a line-of-sight path, ground or sea reflection may give rise to reflected and scattered energy arriving at the receiver in addition to the direct ray. This may cause slight enhancement or severe fading as

refractive index variations on the path change the relative phases of the different ray components. By applying simple geometry, the reflection point can be determined analytically; classical solutions are found in numerous textbooks.

The equations presented by Boithias [1983] were applied to all paths except the one from Kakkiviak to get the data shown in Table 2. The calculations are based on an effective earth-radius of 8500 km (or a k factor of about 4/3). The distance between the point of reflection and the transmitter location is given as a fraction of the total path length. The grazing angle, expressed in milli-radians, is the angle between the sea surface and the incident wave at the point of reflection. The reflected wave travels a longer distance than the direct wave and that difference, the path delay, when expressed as a function of the wavelength, is sometimes referred to as the phase delay. The path inclination, expressed in milli-radians, is the angle between the horizon and the direct wave at the receiving antenna. These parameters will be referred to during the analysis in section 6.

Table 2. Parameters related to sea surface reflection on the line-of-sight paths. The values in parentheses are the change of the nominal values for a high tide to low tide change of 11 metres.

PATH NAME	POL	PATH LENGTH (km)	REFLECT. pt PATH LENGTH ratio (%)	GRAZING ANGLE (mrad)	PHASE DELAY (rad)	PATH INCL. (mrad)
Kakkiviak-Warwick	H	182.0	blocked	-	-	1.03
Lacy-Warwick	H	101.7	43.00 (0.17)	2.87 (0.22)	4.00 (0.61)	1.24
Warwick-Cracroft	V	131.9	47.58 (0.04)	2.11 (0.17)	2.77 (0.44)	0.48
Cracroft-Vanderbilt	H	125.7	46.77 (0.05)	3.81 (0.18)	8.85 (0.82)	0.72
Vanderbilt-Iqaluit	V	89.6	87.44 (-2.1)	2.00 (0.42)	0.75 (0.42)	5.45

3. DESCRIPTION OF THE REPEATERS

The measurement system, as used in this experiment, was entirely conceived and built at CRC and did not require the development of any new technology. Every element was either bought or put together from parts readily available commercially. The design has however required a great deal of good engineering to which many have contributed in their own way over the years. What follows is a brief description of the repeaters used in this experiment.

The measurement system was designed to operate for at least a year on air depolarized caustic alkaline cells AD608Z and at temperatures as low as -50°C. The primary power at each site was provided by a single battery bank made out of 12 cells connected in series for a rated capacity of 2000 Ah. To preserve the cell efficiency at this low temperature, the current drain had to be kept under 200 mA [Armstrong and Barnes, 1979]. This was achieved by careful design of the electronics and also proper power distribution architecture throughout the system.

Both the transmitting and receiving antennas consisted of a parabolic cylinder reflector of about 208 cm x 104 cm x 61 cm with a two element yagi primary radiator, providing a gain of 17 dBi. The nominal RF power of the transmitter was 100 mW; the noise figure of the receiver did not exceed 4 dB. The link margins were further increased, without imposing any extra power consumption, by limiting the system intermediate frequency (IF) bandwidth to 15 kHz. Even though this was about twice the necessary bandwidth, it relaxed the necessary frequency stability of the oscillators, and allowed the use of a simple temperature compensation technique.

The transmitters used FM(FSK) modulation and were essentially composed of a VHF Voltage-Controlled-Oscillator (VCO) followed by a frequency doubler and a buffer/filter amplifier. To maintain frequency stability but nevertheless allow modulation deviation of ±3.5 kHz around the carrier, the VCO was locked to a Voltage-Controlled-Crystal-Oscillator (VCXO) through a high ratio, low power frequency divider. Any frequency deviation imposed on the VCXO by the baseband signal was in this way multiplied 180 times before reaching the output.

The receiver design was based on the standard heterodyne technique, using a single frequency conversion stage to obtain an intermediate frequency of 21.4 MHz. Because of the remote and isolated environment, image rejection and co-channel interference rejection were of less concern. The low noise figure was achieved by using a commercial hybrid preamplifier followed by a low-loss filter. The demodulation was done by a crystal quadrature detector.

Processing of the asynchronous data, before modulation and after demodulation, was under the control of an 8 bit CMOS microprocessor. Bit recovery was performed by comparison with a self adjusting threshold level. Word synchronization and randomization, as well as analog to digital conversion, were entirely dependent on software algorithms.

Two temperature sensors composed of an integrated circuit transducer and a low offset, low drift amplifier were installed at each site. One sensor was installed within the electronic enclosure to monitor the operating temperature of the receiver, and the other was attached outside each enclosure to monitor the ambient temperature of the site. The latter was placed within a bell-shaped cavity, with the open end facing the ground, to protect it against direct sun exposure, snow or ice covering, and air drafts; it was also thermally isolated from any metallic object.

The electronics were not only designed for low current consumption but low temperature operation as well. To alleviate this requirement, the transmitter, receiver and logic circuitry were surrounded within their metallic enclosure by 5 cm of polystyrene foam of high thermal resistance. Heat released by the equipment served to raise its own operating temperature by as much as 13.3°C on average, with a site-to-site variation of less than ±1.8°C. Figure 6 shows an example of how the equipment temperature lagged the site ambient temperature. Note the filtering action and the slow time response of the insulation material. The equivalent thermal resistance of a complete enclosure was measured to be about 4.5°C per watt.

The antennas were mounted on a tower made of reinforced but light 5 cm aluminum pipe, with a central mast of 6 m having a cross section of 7 cm. Four legs or braces came down from near the top to join four others

coming from the base of the mast, and cross braces were added for greater stability. The tower was secured to the ground by the use of a large wooden box placed over the foot of each leg, filled with rocks to at least 450 kg weight. The electronics enclosure, measuring about 50cm x 20 cm x 80 cm, was attached 2 metres above the ground at the centre of the tower.

The battery of cells was kept in a wooden crate placed on the ground near the central mast and just below the enclosure containing the electronics. All of this hardware was designed compactly enough to fit on board a Twin-Otter aircraft and be ferried to the top of mountain peaks by a Bell-206 helicopter. Three persons could do a complete site installation in less than a day.

4. DATA MEASUREMENT, PROCESSING, AND ACCURACY

At the end of each path, power measurement of the received RF signal was done of the IF level of the UHF receiver. Each receiver incorporated three logarithmic stages of power detection to produce a dc voltage, in the range of 0 to 5 V, proportional to the strength of the received RF signal.

Before field installation, each receiver had undergone a thorough calibration process in the laboratory. By means of an automated test setup, calibration data were gathered in 0.1 dB increments over the 75 dB dynamic range of the power detectors. Each calibration was repeated at temperatures of -40°, -20°, 0° and +20°C.

During the experiment, the output voltage of the detector was sampled once every 2 seconds, and the data immediately digitized and transmitted to Iqaluit where it was recorded. Each sample so taken was eventually retrieved from the magnetic cartridges for performing the signal analysis.

The temperature sensors inside the enclosures were sampled once every 20 seconds, and the data digitized. During the analysis, 30 such samples were averaged to determine the mean operating temperature of the receivers over a 10 minute period. Each operating mean temperature value was used for interpolating the corresponding detector calibration curves obtained during the calibration process. Sampling of the external sensors was also done once every 20 seconds.

All temperature sensors were calibrated in the laboratory and are believed to have an absolute accuracy of ±2.0°C, a nonlinearity not exceeding ±0.4°C, and a resolution of 0.7°C. Likewise, the power measurement error is estimated to be less than ±1.0 dB for most of the dynamic range of the receivers. The resolution varies from 0.8 dB to 0.1 dB (0.3 dB typically) depending whether the measurement is done or not in the knees joining the logarithmic detection levels. At low signal-to-noise ratios the resolution gradually worsens as the receivers reach their noise floor around -128 dBm.

It must be pointed out that measurement of relative signal strength was the main concern and that the system was only loosely calibrated to make absolute field strength measurements. For the purpose of link calculation, antenna characteristics were assumed to be in accordance with manufacturer's specification, losses through transmission line, connector, and adaptors were accounted for by assuming typical values. Therefore, adding to the receiver and transmitter calibration errors are the uncertainties about antenna gain, impedance mismatch, line loss error,

azimuth alignment, polarization skew, etc. These additional factors must be counted twice, once for each end of the link, to estimate the total error. The root-mean-square absolute measurement error could easily total ±3.5 dB.

Sampling of the data was done with an accuracy of 8 bits (one byte). Every 2 seconds, a string of 9 bytes was recorded on a magnetic cartridge. The first five bytes contained the five samples of signal strength measured at the receivers, the next three, the relative time of sampling, and the last one, a form feed character for string synchronization. The temperature data were multiplexed with the time of sampling information. Although a cartridge could hold about 4 Mbytes of data, taking more than 10 days to be filled, these were normally changed weekly and mailed to Ottawa.

Upon receipt of a cartridge from Iqaluit, the data were transferred to 9-track magnetic tape. The 15-month recording period necessitated the use of six tapes, at 1600 byte-per-inch density. Since the data recording format included the necessary timing information to easily retrieve the precise sampling time, the data were grouped in daily blocks of 24 hours, Universal Time (UT). For each block, five hourly power distribution files were generated, a file for each of the receivers.

Since each receiver was calibrated over a 75 dB power detection range, with a 0.1 dB resolution, 750 different received power levels could at best be distinguished. Each hourly power distribution file contained the distribution of the samples over the 750 "bins" and the 24 one-hour intervals (UT) making the day. The file format was compressed so that empty bins were not stored.

Hourly distribution files were subsequently added to each other to produce the monthly distributions; the latter combined to get the seasonal distributions, and so on. Four types of corrections were made along the way:

a) the hourly distributions were examined and cleaned up from any obvious transmission errors;

b) any hour within the hourly distributions that was found short sampled by more than 10% was rejected from the data. This could occasionally happen because of a power outage at Iqaluit or a late cartridge change;

c) since months have different numbers of days, and since some distributions had missing data, all monthly distributions were given equal weight before adding their distributions;

d) some hourly distributions had to be adjusted by offsetting them by a constant power level.

This last type of correction needs further explanation. In the course of the experiment, strong blizzards with wind gusts exceeding 150 km/h damaged the five repeater stations. The damage was of two kinds.

The first was that under the high wind pressure, some antennas rotated out of their alignment axis. This misalignment introduced several decibels of extra loss on some transmission paths. These events were well identified in time and place, and normal levels were reestablished upon repairs; therefore the data that were affected that way were easily offset to compensate for this constant loss.

The second kind of problem was more severe. It affected the RF cable assemblies. Some assemblies did not withstand the extreme temperature, icing, and wind conditions. The cables being of the smooth-braid copper type, the centre conductor was "sucked out" due to the lack of any lock

between the cable conductors and dielectric [Perelman and Sullivan, 1987]. Moisture could enter the resulting gap and degrade the electrical contacts at the connector ends. The mechanical contact between the inner conductors of the cable and the RF connector could also be lost completely. Cables from all sites but the Labrador ones were eventually replaced by corrugated copper outer conductor cables, a cable type that has the outer conductor mechanically locked to the foam dielectric by annular corrugations.

In any case, visual inspection of the recorded data by means of temporal plots quickly led to the identification, correction, and sometimes deletion, of the affected data. Two paths could not be corrected with a sufficient level of confidence to be analyzed in full detail. These are Vanderbilt-Iqaluit and Kakkiviak-Warwick. For these two paths, the analysis in section 6.4 will summarize the main measured characteristics, with a discussion on the extent of the validity of the results.

5. CLIMATE OF THE EXPERIMENTAL REGION

Various climatological data recorded at Iqaluit during the past 10 years by he Atmospheric Environment Service [Environment Canada, 1986, 1987] are presented in Table 3. The information shows the extreme weather conditions and the harsh climate of this eastern Canadian Arctic area. The climatology of this coastal and oceanic area is complex, mainly because of the distribution of land, water, and ice which influences greatly the heat balance of the earth and atmosphere. A short description of these factors follows.

Latitude.

Because of its latitude, marked variation in the amount of solar radiation occurs throughout the year. In December for example, about one day of bright sunshine accumulates whereas in July the radiation is 10 times more important. Despite the dampening effect that the oblique angle of incidence of the sun's rays has on the heating of the atmosphere, a wide range of temperature results.

Ice conditions.

Late in October, new ice begin to form in the Hudson Strait but storms and tidal currents keep breaking it up. By December the strait is full of pack ice, which is kept in motion all winter by currents and wind, never forming a solid sheet [Dunbar and Greenaway, 1956]. In June the ice begins to deteriorate, and late in the month there is a general movement towards the east. Normally by August the Hudson Strait is clear except for small patches of loose ice.

In Frobisher Bay new ice builds steadily from about mid-October. Tremendous tides keep much of the ice in motion all winter. A few small open patches are usually found near the head of the bay. In March and April, maximum ice conditions are reached and the bay is covered with close or consolidated pack ice, which extends south along the coast of Labrador. Starting about June the pack ice deteriorates quickly, and by late August has practically disappeared.

Site : IQALUIT — Comparative Climatological Data for the past 10 years

MONTH	Year	TEMPERATURE (C) Max	Min	Mean	RAIN (mm)	SNOW (cm)	WIND SPEED Avg	Max	SUN (hr)
JANUARY	1978	-15.8	-40.6	-30.7		7.4	12.4	56	25.7
	1979	2.9	-38.6	-21.6		17.9	16.7	74	30.0
	1980	1.9	-37.3	-20.4		45.9	23.0	89	
	1981	-7.6	-31.1	-21.1		37.1	17.0	63	44.2
	1982	-3.8	-33.8	-18.9		28.8	18.3	74	31.1
	1983	-20.2	-41.8	-33.8		12.3	10.7	70	33.1
	1984	-17.0	-44.9	-33.3		9.2	7.2	37	8.8
	1985	2.7	-34.9	-17.9		27.8	16.7	59	54.4
	1986	-5.5	-39.5	-25.9		44.4	16.9	83	42.4
	1987	-10.9	-40.3	-28.3		28.8	15.9	76	46.7
FEBRUARY	1978	-2.2	-37.2	-17.1		3.4	17.2	59	128.7
	1979	-21.6	-44.7	-32.2		18.1	30.1	83	63.4
	1980	-8.0	-37.5	-25.3		5.6	21.8	57	133.5
	1981	-8.3	-36.8	-22.1		95.8	14.9	65	57.0
	1982	-9.0	-41.8	-28.9		22.6	13.6	71	66.4
	1983	-12.3	-44.0	-31.5		25.8	10.2	82	71.7
	1984	-17.1	-43.3	-31.7		6.2	8.1	48	101.1
	1985	-10.0	-41.8	-25.0		13.0	14.6	67	103.5
	1986	2.4	-45.6	-20.1	.2	36.8	18.6	87	54.9
	1987	-15.4	-44.3	-29.3		2.8	17.7	81	128.0
MARCH	1978	-13.2	-38.9	-27.6		23.7	14.9	63	189.2
	1979	.1	-38.3	-21.7		53.5	17.2	100	168.3
	1980	.4	-36.7	-19.5	tr	43.7	16.7	63	98.6
	1981	3.7	-30.9	-13.0	tr	18.5	12.0	48	109.6
	1982	-9.1	-38.8	-27.3		36.5	12.3	80	203.3
	1983	-10.3	-40.2	-26.4	tr	25.0	13.0	50	173.7
	1984	-.5	-41.2	-23.0		14.8	14.0	54	148.7
	1985	.3	-39.0	-23.8		34.2	16.9	74	162.4
	1986	-1.1	-38.4	-26.1		9.0	15.0	57	160.3
	1987	-7.2	-36.9	-24.5		10.2	14.7	70	205.5
APRIL	1978	-.3	-32.8	-15.9		13.8	20.7	65	237.9
	1979	4.0	-26.5	-11.2	.4	53.8	27.3	63	190.9
	1980	-.6	-30.8	-16.0		70.5	19.2	69	210.9
	1981	7.2	-29.0	-13.3	.2	44.4	10.6	56	202.4
	1982	1.2	-29.4	-16.5	tr	56.0	14.1	72	204.0
	1983	1.0	-34.2	-13.3	1.6	44.5	12.6	41	136.0
	1984	.3	-33.0	-15.7		46.4	16.8	74	187.6
	1985	.5	-30.7	-17.4		6.2	18.5	54	269.7
	1986	1.7	-29.5	-12.9	1.2	39.0	14.0	46	185.6
	1987	-.4	-33.5	-16.2	tr	73.0	16.7	63	195.8
MAY	1978	4.3	-16.0	-6.1	.6	16.7	26.0	70	230.4
	1979	9.1	-8.0	-.5	3.2	29.7	22.1	59	119.4
	1980	6.4	-19.0	-1.0	4.8	24.3	17.7	56	113.9
	1981	4.2	-12.6	-4.8	1.8	22.5	15.4	44	172.6
	1982	4.5	-26.1	-5.6	.6	29.5	19.4	67	161.1
	1983	7.4	-21.6	-6.2	.4	49.6	15.4	74	187.9
	1984	6.3	-19.0	-5.1	10.2	46.1	15.3	57	234.7
	1985	7.8	-20.8	-4.0	11.0	8.6	15.4	59	207.6
	1986	5.4	-16.0	-3.5	12.3	21.2	15.9	48	152.9
	1987	1.3	-19.0	-7.7	tr	41.0	18.1	59	181.0
JUNE	1978	8.7	-10.2	.6	25.5	12.0	22.2	52	170.0
	1979	10.3	-3.2	2.7	34.6	13.9	21.0	52	149.0
	1980	17.2	-2.4	4.4	48.9	12.2	16.0	44	125.8
	1981	14.2	-3.4	3.8	13.6	.3	13.0	44	203.9
	1982	15.5	-3.7	3.9	13.7	4.0	11.2	63	198.3
	1983	12.5	-4.5	3.8	29.5	.2	14.0	41	234.7
	1984	14.7	-7.4	3.6	28.0	39.4	11.7	35	196.8
	1985	20.1	-2.2	6.3	49.8	3.6	17.7	44	268.6
	1986	8.0	-4.7	1.8	tr	9.8	14.7	63	
	1987	17.2	-6.5	3.5	47.5	21.2	12.6	44	168.8

MONTH	Year	TEMPERATURE (C) Max	Min	Mean	RAIN (mm)	SNOW (cm)	WIND SPEED Avg	Max	SUN (hr)
JULY	1978	15.4	.0	5.8	81.2	tr	16.7	46	144.1
	1979	18.0	.4	7.5	90.2		21.1	56	161.6
	1980	20.4	.2	7.4	28.5		12.4	65	281.0
	1981	23.3	1.6	9.0	46.6		11.4	46	230.6
	1982	17.8	-.6	7.4	71.7		14.5	46	163.1
	1983	20.9	.7	7.7	74.5	tr	11.9	48	284.9
	1984	24.4	-.2	9.0	46.6	.2	9.8	56	295.8
	1985	20.3	1.9	8.9	67.2		10.3	46	212.3
	1986	22.2	1.0	8.8	56.3		11.7	54	247.1
	1987	18.3	.8	7.6	55.6		11.8	50	257.0
AUGUST	1978	20.7	1.8	6.8	96.3	tr	16.6	52	154.4
	1979	17.1	.0	6.3	110.4	.9	22.7	63	125.6
	1980	22.4	-.9	7.7	31.3		10.8	44	219.9
	1981	16.9	-1.9	7.5	44.8	7.4	15.5	48	202.5
	1982	20.1	.6	6.6	36.3	3.2	15.1	48	162.4
	1983	13.6	.0	6.4	66.8		11.2	52	112.9
	1984	14.5	-.4	6.0	78.4	1.2	15.1	57	138.7
	1985	23.1	.4	8.2	54.9		12.3	56	218.2
	1986	18.4	.0	5.9	129.6	tr	14.3	57	95.3
	1987	12.1	.5	6.0	83.1		11.4	43	110.6
SEPTEMBER	1978	13.4	-7.6	1.9	27.9	19.9	20.1	50	114.8
	1979	7.6	-5.3	2.0	131.6	12.2	17.4	63	45.2
	1980	14.4	-1.3	1.5	50.5	9.9	11.6	46	91.0
	1981	12.8	-1.4	4.0	146.8	1.8	14.3	57	72.9
	1982	10.5	-8.9	-.2	13.5	46.1	18.4	33	91.2
	1983	11.3	-4.6	1.9	2.7	12.5	13.1	37	167.5
	1984	9.6	-8.0	1.6	17.8	14.5	14.9	67	78.5
	1985	9.7	-2.5	3.6	67.9	1.0	14.5	46	100.7
	1986	10.4	-6.7	2.5	71.4	5.7	17.3	72	87.1
	1987	11.2	-4.0	4.2	46.0	.8	12.5	50	160.5
OCTOBER	1978	2.4	-27.1	-6.1	8.9	58.8	27.0	69	60.9
	1979	5.6	-18.3	-3.5	11.7	13.0	19.0	54	43.5
	1980	6.0	-16.7	-3.2	8.7	17.9	17.0	56	70.1
	1981	7.3	-14.0	-2.2	5.2	28.7	16.5	48	63.9
	1982	2.8	-22.7	-5.9	.1	44.5	18.0	59	51.2
	1983	2.7	-22.0	-5.6	tr	37.5	19.7	41	69.0
	1984	5.0	-18.5	-4.5	5.0	49.9	13.6	59	58.5
	1985	4.2	-16.9	-3.4	46.9	44.2	13.5	48	32.6
	1986	1.0	-23.4	-10.8		17.0	20.0	104	99.9
	1987	2.9	-16.3	-4.1	tr	29.2	12.4	50	57.8
NOVEMBER	1978	-.6	-36.2	-21.8		28.9	20.4	69	
	1979	-3.3	-29.8	-15.2	tr	50.9	19.9	63	60.9
	1980	3.8	-28.8	-10.1	.3	31.8	17.1	70	53.2
	1981	.9	-23.6	-11.4	tr	36.0	16.8	61	49.2
	1982	.3	-27.0	-13.8		45.3	17.1	72	42.4
	1983	1.5	-33.3	-16.2	tr	34.7	21.9	48	61.5
	1984	-1.0	-26.5	-13.8		26.4	19.5	59	44.8
	1985	5.2	-25.7	-9.6	tr	22.8	15.2	63	43.4
	1986	-3.4	-30.2	-17.3		15.0	12.3	59	21.7
	1987	1.5	-31.9	-14.0	tr	30.8	19.8	69	64.2
DECEMBER	1978	1.7	-32.3	-15.1	tr	12.8	19.8	70	13.5
	1979	-1.9	-38.3	-23.5		25.2	12.1	56	25.5
	1980	-2.3	-36.8	-22.4		17.2	14.8	63	17.8
	1981	-2.3	-32.4	-16.8		26.8	15.2	52	25.0
	1982	-6.3	-42.0	-27.7		27.9	17.4	111	19.6
	1983	-9.0	-40.4	-26.2		17.8	15.4	52	27.0
	1984	-5.9	-36.2	-24.6		24.6	15.5	59	15.8
	1985	2.0	-31.5	-11.8	tr	56.8	13.3	52	22.7
	1986	-7.2	-39.8	-26.4		18.4	14.1	80	19.4
	1987	-8.0	-35.0	-21.4		12.0	11.5	59	38.2

Notes: 1. Wind Speed - km/h
2. Max = Max. 2 min. mean speed
3. SUN - Bright Sunshine
4. tr - Trace

Table 3.

Fog.

On the Baffin east coasts, the pack ice is carried away by the cold Baffin Land Current which takes its source from the Arctic Ocean. This current is reinforced to the south, near the mouth of Hudson Strait, by added inflow through Hudson Strait and a relatively warm westward moving West Greenland Current [Fairbridge, 1966]. Because of the rapid drop of surface temperature experienced by the air masses moving from a warm water area to a cold water area, frequent occurrences of fog banks characterize this area. The average incidence of fog for June through September at Resolution Island is 65 days, in fact the worst in the entire Eastern Arctic [Mowat, 1960]. In general, June to August are the foggiest months of the year in that region. In June, fog increases as the snow disappears and temperatures rise. Warm moist air moving out over cold and partially ice-filled water produces advection fog.

Cloud.

The maximum cloudiness is in autumn. After the land is covered by snow, a layer of stratus or fog usually hangs over the Bay and areas of open water. The air over the water becomes heated, condensation takes place when it rises and cools, and low cloud forms. The mean annual cloudiness at the mouth of Hudson Strait and on Resolution Island is 77%. The winter mean is about 75% which shows the effect of open water that prevails over this area during most of this period. In May it is about 80%, in mid-summer 70%, and in autumn 85%.

Precipitation.

As for other regions of the arctic, precipitation is usually light due mainly to the low temperatures, which depress the absolute humidity and therefore lower the availability of moisture for precipitation. April to October are generally the months of greatest precipitation as is shown in Table 3.

In Iqaluit, yearly average precipitation is about 235 mm in rain, of which 80% falls in July, August and September, and 265 cm in snow. The snowfalls are more or less uniformly distributed in time, except for July and August where falls are very rare. The precipitation can be very variable from year to year.

Wind.

The experimental paths are located in a region where wind and icing conditions are among the most severe in Canada. The mean annual surface wind speed at Resolution Island is about 16 knots i.e. 30 km/hr [Dunbar and Greenaway, 1956]. This is one of the highest in the Canadian Arctic. Except for the site in Iqaluit, all the others are located on mountain-tops, and were often submitted during this experiment to wind speeds of gale strength. The Environment Canada wind and ice maps classify the region in the highest categories with wind reference velocity pressure of 850 Pa, and nominal icing thickness of 40 mm [Canadian Standards Association, 1986]. In summer, winds are variable and subject to frequent changes. This is due to a flat pressure gradient, a well known summer characteristic of the whole Canadian Arctic. In fall, winter, and spring, the prevailing wind direction near the surface at Iqaluit is north-west.

Temperature.

Resolution Island is a striking example of an arctic maritime climate [Dunbar and Greenaway, 1956]. As is shown in Figure 3, the curve of the mean daily temperature is relatively flat for both summer and winter. In winter, Resolution Island's coldest months are the warmest of any of the Canadian Arctic islands while the July mean temperature is almost equally the lowest [Maxwell, 1981].

Temperatures along the coasts of Frobisher Bay and Labrador reflect a greater continental influence, particularly during the winter where lows are more pronounced. In Iqaluit, the temperature drops as soon as Frobisher Bay freezes over, while at the mouth of Hudson Strait, large areas of open water moderate the temperature change. Land masses heat and cool rapidly whereas water heats more slowly and retains its heat longer.

In general, the air in winter is drier, more stable and colder than during the summer. Over the snow-covered land and solid pack ice, surface-based thermal inversions occur 50-70% of the time because of radiative cooling. In summer isothermal conditions are usually found in the first few hundred metres of the atmosphere but temperature inversions still occur for 10-20% of the time. The summer air is more moist and rapid surface heating makes it unstable. The degree of stability depends upon the length of time it remains over water. Atlantic air reaching the south Baffin Island area is quite stable because of the long over-water path and the cooling effect of the Labrador Current.

Atmospheric Refractivity.

At UHF and below, rain, hail, snow and fog are of no consequence. Received signal strengths vary with time mainly because of changes in the refractive index of the atmosphere [Hall, 1979].

The seasonal behaviour of surface refractivity at selected sites in Canada was reported by Segal and Barrington [1977]. The pertinent data for Iqaluit were adapted to the presentation made in Figure 4.

The top left diagram shows the monthly mean refractivity and the double standard deviation upper and lower limits around the mean. Both the refractivity and its range are characteristically reduced during the summer period; a trend commonly observed in other Arctic regions, and opposite of what is observed in the more southern regions.

Because of the flat pressure gradient the mean dry air component of the refractivity (top right diagram) depends almost uniquely on the temperature variations. The temperature standard deviation data shown in Figure 3 (top right diagram, solid curve), were scaled and plotted on top of the dry component curve (Figure 4) to show the good correlation between the two.

The water vapour contribution to the refractivity is shown in the bottom left diagram. From November to April, the mean wet air component is almost negligible.

Finally, the bottom right diagram represents the annual and summer probability distributions of the ground-based refractivity gradient averaged over the lowest 100 metres of the atmosphere. The two refractivity gradient medians are very close to the median of the temperate region (-39 N/km) which corresponds to an effective 4/3 true earth radius. Ducting ($dN/dz < -157$ N/km) is not expected to present itself frequently, about a tenth of a percent as a fraction of the year, and twice as much between July and September. Earth bulging ($dN/dz > 0$), the blocking of radio paths by the surface, could be more common with about 5% occurrence in the summer.

Data from external temperature sensors were available only for the sites on Baffin and Resolution Islands. In general, variations observed at one site were also observed at the other sites, but with an offset in time and/or temperature (see the example given in Figure 5a). The time offset was small in most cases. At times, however, a delay of 5 to 6 hours was introduced, possibly by stagnant or slow-moving air masses. The direction of the displacements seemed variable although a more thorough inspection could reveal a favoured direction since we know that the surface winds at Iqaluit come predominantly from the northwest. The temperature offset

Table 4. Non-exhaustive list of biased weather conditions observed at Iqaluit during the test period. Most of those conditions depart from the statistical normal for the given month based on the data for the years 1951 to 1980.

SEP.'86: About twice the normal total monthly precipitation. Despite normal temperature, over twice the normal rainfall and less than half the normal snowfall. Rainfall of 28.4 mm on the 5th. This broke the highest level of rainfall ever recorded at Iqaluit in a 24 consecutive hour period for the month of September in the past 41 years. Max. gust speed of 91 and 87 km/h on the 14th and 27th respectively.

OCT.'86: Mean monthly temperature of -10.8°C. This broke the lowest mean monthly temperature ever recorded at Iqaluit during the month of October in the past 41 years. About a third of the normal total precipitation. No rain, the normal rainfall is 6.2 mm. Max. gust speed of 137 km/h on the 12th. This broke the highest max. gust speed ever recorded at Iqaluit during the month of October in the past 36 years. The max. wind speed (2 minutes mean) record for the same month was also broken on the same day, with a max. speed of 104 km/h. Interestingly enough, a total of 99.9 hours of bright sunshine were recorded during the month, for a new high ever, almost twice the normal amount of sunshine. Max. gust speed of 83 and 91 km/h on the 16th and 25th respectively.

NOV.'86: Mean monthly temperature was 7°C below the normal. Total monthly snowfall was less than half the normal. Cloudy. About half the normal amount of sunshine.

DEC.'86: Blizzard on the 2nd with 98 km/h max. gust speed and 80 km/hr max. wind speed (2 minutes mean).

JAN.'87: Blizzard on the 25th with 96 km/h max. gust speed and 76 km/hr max. wind speed (2 minutes mean).

FEB.'87: Temperature went below -40°C on 8 days during the month. Total snowfall of only 2.8 cm. Total normal snowfalls are of 36.8 cm.

MAR.'87: About a third the normal total monthly precipitation.

APR.'87: Twice the normal total monthly precipitation.

MAY '87: Mean monthly temperature of -7.7°C. This broke the lowest mean monthly temperature ever recorded at Iqaluit during the month of May in the past 42 years.

JUN.'87: Over twice the normal monthly snowfall. About 1.7 times the normal monthly rainfall.

SEP.'87: Almost twice the normal amount of sunshine.

OCT.'87: No rainfall. Total normal rainfall is 6.2 mm.

NOV.'87: Max. gust speeds of 81 and 98 km/h on the 5th and 7th respectively.

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was the most noticeable and could be quite considerable, depending on the prevaling cloud and front conditions. Furthermore, in moving from site to site toward Resolution Island, the temperature spread observed at each site is somewhat more limited. This is shown in Figure 5b where for each of the sites, the monthly mean temperatures are plotted relative to the temperature mean obtained at the site over the whole 15-month observation period.

The experiment was conducted during the period September 1986 to November 1987 and as such, cannot be expected to give results entirely representative of weather conditions occurring outside the test period. Ideally, one would like to conduct this type of experiment during a long enough period, say several years, so that the test-area conditions are not only representative of their global climatology but are each represented in fair proportion. Some discrepancies to the statistical normal are presented in Table 4.

6. DATA ANALYSIS AND RESULTS

6.1 Predicted and observed long term medians.

The CRC propagation prediction computer program [Whitteker, 1983] was used on each path to calculate the expected long term median levels, and excess loss over free space. These estimates, and comparison to the measured median levels of the December 1986 - November 1987 period, are given in Table 5. The predicted values are based on an earth-radius factor k of four-thirds.

Because of the large clearance height of the middle paths (see Figure 2), reflections over the sea surface are expected to provide a few decibels of excess gain over free space levels. Diffraction should occur on the path Kakkiviak-Warwick and cause a considerable excess loss of over 15 dB. Only the path Vanderbilt to Iqaluit is believed to have an excess loss due to reflection from the sea surface.

Table 5. Some long term median statistics.

PATH	PATH LENGTH (km)	Predicted excess loss or (gain) . Reflect. (dB)	Diffract. (dB)	Predict. Median (dBm)	Observ. Median (dBm)	Observed minus Predict. (dB)
Kakkiviak-Warwick	182.0	-	15.6	-95.6	n/a	n/a
Lacy-Warwick	101.7	(2.5)	-	-71.7	-72.9	-1.2
Warwick-Cracroft	131.9	(3.2)	-	-72.3	-67.9	+4.4
Cracroft-Vanderbilt	125.7	(4.0)	-	-71.3	-82.2	-10.9
Vanderbilt-Iqaluit	89.6	0.9	-	-72.8	-78.7	-5.9

The annual median value for the path Kakkiviak-Warwick could not be obtained because of the problems mentioned in section 4. As a first approximation, consider the first five days of problem-free operation in September 1986 (see Figure B5, Annex B). The 5-day median was -100.1 dBm, i.e. 4.5 dB lower than the long term predicted value. This rough estimate

indicates that the observed diffraction losses are slightly greater than the ones predicted. On the basis that those five days were fairly active days, and may be more or less representative of the long term "normal" conditions, this difference is not judged very significant.

The observed median levels for the paths Lacy-Warwick-Cracroft are the closest to the predicted values. Except for the reflection effects, both paths propagate essentially near free-space-like conditions. The importance of reflection on the path Warwick-Cracroft may have been over-estimated by 1 dB or so, but the main discrepancy is probably attributable to the absolute measurement accuracy of the system (see section 4). On the path Cracroft-Vanderbilt, however, the observed median is unreasonably low and the difference with the predicted value cannot be fully accounted for. Since the signal distribution for this path, as will be shown in section 6.3, was not remarkably different from the other quite similar path Warwick-Cracroft, the link may have suffered from antenna misalignment or other unknown error.

Finally, the observed median for the path Vanderbilt-Iqaluit is given with some reserve since the data from this path went through numerous correction steps. Note that on this path, the clearance height is less than 60% of the Fresnel zone. An error in the estimation of the effective-earth radius has therefore more effect on the link calculations of this path than on any other one. The extra loss suggests that some diffraction could be occurring and that the average factor k may be somewhat less than 4/3, i.e. the mean refractivity gradient value would be higher than -39 N/km.

6.2 Monthly 50, 10, and 90 percentile levels.

Monthly medians are shown in Figure 7. The monthly 10 and 90 percentiles are also shown on the same figure. Detailed monthly summaries of fade depth and distribution are provided in graphical format in Annexes A and B, and also in tabular format with other supplementary statistical information in Annex C.

As far as propagation characteristics are concerned, and based on the present measurement set, this region of the Arctic seems to have only two seasons: a rather inactive prolonged winter and a four-month quite active summer. The observed fading trend, especially at the 10% probability level, is much the same on all three paths being analyzed here. Other measurements made in the high Arctic have also revealed that fading is most severe during the summer period [Butler, 1985].

It is well known that these depressions in signal strength can be characterized by changes in the refractive index of the atmosphere. Referring back to Figure 4, one can see that the wet component of the refractivity is at maximum levels during the June to September period. These months are the only months in the year where the temperature goes above 0°C. As the temperature rises, the atmosphere can hold a relatively higher content of water-vapour without saturating. Rapid surface heating makes its thermal and transmissive characteristics less stable, hence increasing the chances of radio transmission fading. Conversely, during the October to May period, the wet component contribution almost vanishes and the signals are remarkably more stable.

This bi-seasonal division is of course somewhat arbitrary. There are occasional events that contradict that general trend. For example, the

month of July on the path Cracroft-Vanderbilt (Figure 7) was remarkably good; the fading was much less severe than on the similar Warwick-Cracroft path. This might be more an exception than the rule.

Figure 8 gives more insight in to what happened on each path during the observation period. The days that no data were available create the blank gaps seen between the curves. Another example of an event that does not quite fit the bi-seasonal division is observed in mid-March. Signals received from Lacy and Cracroft were deeply depressed for a day or two, proving that strong fading can occur outside the summer period. Also in March, at about the same period, a strong enhancement was observed on the path Warwick-Cracroft. Take note that the 10 and 90 percentile levels for March in Figure 7 are magnified because of the fewer number of days available for calculating the distribution of this particular month. This also applies to graphs and statistics given for the same month in Annexes A, B, and C.

6.3 Annual, seasonal, and worst month cumulative distributions of the received signal strength

Figures 9, 10, and 11 give the relative cumulative distributions of the three middle paths: Lacy-Warwick, Warwick-Cracroft, and Cracroft-Vanderbilt. Each distribution is offset by the value of the annual median observed on the corresponding path. Three distributions are given on each plot, covering the annual, summer, and worst month time periods.

The months chosen for the summer period were dictated by the bi-seasonal behaviour of the data, as was pointed out in section 6.2. The selection of the worst months within the December 1986 - November 1987 period was made as follows. On the path Cracroft-Vanderbilt, both the median and 10 percentile were at their lowest in September 1987 (Figure 7). On the path Lacy-Warwick, the June, July and August medians were at about the same depressed level but June was chosen since it had the lowest fade depth 10 percentile. Finally, on the path Warwick- Cracroft, September was chosen since it had a slightly lower 10 percentile than June. Consulting Figure A2 for this path (in Annex A), one sees that the low probability end or tail of the July distribution is somewhat worse than the tail of the September distribution. Of course, based on different criteria, other choices might have been made.

An obvious characteristic common to all these distribution curves (Figures 9-11) is the marked asymmetry about the median level axis. Below the median, the levels seem endlessly and monotonously decreasing in value, whereas above, they conversely flatten out almost completely. Such asymmetry is typical of long term fading in maritime arctic climates [Butler, 1985].

Turning our attention for a moment to the field strength above the median (the least important part of the distribution), the enhancements at the 99.99% probability level are narrowly confined within a 5 to 10 dB range above the median. This is a very limited range when compared to what is normally encountered in the more southern region [Whitteker, 1985]. All field strength values are above free space levels and most of the increase must therefore result from superrefractive conditions or even ducting. The path Warwick to Cracroft is certainly the one where this is most easily noticed (see Figure B2, September 1986 and 1987, March 1987, for examples).

The effect has been somewhat distorted in Figure 10, due to a non-linearity of the power detector operating near the upper limit of its dynamic range.

For all paths, enhancements are slightly more frequent during the summer months, although the difference with the annual occurrence rate is almost negligible. The occurrence of ducts seems more prevalent on these paths than indicated by the radiosonde data (see Segal and Barrington, 1977) although the radiosonde measurements were obtained over land and may not represent fairly the oversea conditions.

From a system design viewpoint, the field strength distribution below the median is certainly of utmost importance. It is an essential constituent in determining the required link margin and guaranteeing system reliability. That part of the distribution is best analyzed by breaking it down into three portions or regions of fade depth:

- a tail region with fades having considerable depth (about 15 dB or more);
- a transition region (fade depths between about 3 and 15 dB);
- a region with fades having less than a few decibels of depth (0 to about 3 dB).

The boundary points suggested in parentheses seem to best characterize the present set of data. In other climatic conditions and/or geographical areas, somewhat different boundaries are distinguishable, although they are often less distinct.

These fade depth divisions correspond roughly to the regions where different mixtures of physical mechanisms cause the fading. In the large fade depth region, Olsen et al. [1987] have pointed out the evidence that the atmospheric effects, particularly defocussing, are mainly responsible for reducing the direct signal to a level where the sea reflected signal can interfere destructively with it. Part of the deep fading would also be attributable, although likely to a much smaller degree, to the occurrence of atmospheric multipath. Conversely, from some point in the transition region up to around the median, sea surface reflection and multipath effects are believed to play a less important role in the fading mechanism. This is because the magnitude of the direct signal is relatively large and therefore little affected by the weaker interfering signals. In the small fade depth region, long-term atmospheric mechanisms such as scintillation would seem to be dominant; in the transition region, defocussing is most likely the commanding mechanism.

Large amounts of experimental data show that the cumulative amplitude distribution of fading in the deep-fade region has a prevailing slope of 10 dB per decade of probability [Lin, 1971]. Such a slope is one of the characteristics of the Rayleigh distribution, the Nakagami-Rice distribution, and other more complex distributions [Beckmann, 1967]. On microwave paths in maritime temperate climates, it has been observed that the end of the transition region preceding the deep fade tail is often characterized by a slope somewhat greater than 10 dB/decade, whereas in the low fade depth region, the slope is fairly small, much less than 10 dB/decade [Olsen, 1988]. As will be demonstrated, the same behaviour, although perhaps less extreme, seems to be present on these arctic maritime paths at UHF.

The slope value of the tail and transition regions can be obtained by taking the derivative of the distribution curves. This was performed on the distribution sets presented in Figure 9, 10 and 11, by calculating, by the method of the least squares, the regression coefficients of a logarithmic

curve fitted to a short window of points along the distribution curves. This process was repeated by moving the window one point at a time until the whole curve had been traversed. The results of this derivation process are plotted in Figure 12 and can readily be compared with the theoretical and constant Rayleigh distribution slope of 10 dB per decade.

The variability of the slopes is greater where the probability confidence is at its lowest: near the end of the tails and during the short observation period that represents the single worst month. For the annual and summer periods, a large part of the fluctuations are contained within ±2 dB of the Rayleigh slope, regardless of the path.

The greatest discrepancy, although this may be a statistical anomaly, is that observed on the path Lacy-Warwick. The annual fading curve (Figure 9, upper graph) clearly has the characteristics of a Gaussian (log-normal) distribution in the large fade depth tail. By extending the straight slope curve upward until it reaches the median axis, one finds a typical standard deviation of 13.7 dB, centred around an hypothetical median +16.3 dB higher than the real one. The large fade depth tail summer month distribution for the same path is also quite rectilinear, and therefore apparently Gaussian, with an extrapolated standard deviation of about 12.3 dB.

The derivation process described above highlights clearly the fade transition region by an abrupt downward change in the slope of the curve. The value of the slope in this transition region ranges from a high of over 14 dB/decade on the Lacy-Warwick annual distribution, which appears more log-normally distributed, down to the 10 dB/decade rate on the Cracroft-Vanderbilt distribution.

One has to note in Figures 9 to 11, the quasi-parallellism between the large fade depth tails of the distributions for a given path: the curves for the annual, summer, and worst month distribution are almost parallel. The tails of the summer and worst month distributions seem offset from the annual distribution by near constant amounts. This is due to the bi-seasonal nature of the observed fading. Outside of the summer period, there is so little fading that the fall-winter-spring cumulative distribution is relatively flat and almost tailless. Consequently, the tail of the annual distribution is mainly determined by the tail of the summer distribution but adjusted by its time contribution. Since the 4-month summer distribution makes up 4/12th of the 12-month annual distribution, the tail of the summer distributions appears translated horizontally on the probability scale by a factor of 4/12 or 0.48 decade. If the tails had the 10 dB per decade slope of the Rayleigh tail model, the ratio in power level between the tails of the annual and summer distribution would be a constant 4.8 dB (for a regular summer period of 3 months, the value would be 6 dB). This offset value for the three distribution sets illustrated in Figures 9, 10 and 11 is given graphically in Figure 13 (upper graph). The Lacy-Warwick-Cracroft Summer/Annual tail ratios are effectively varying around and close to the 4.8 dB constant. The Cracroft-Vanderbilt curve is averaging a lower absolute ratio than the others, and this indicates that the propagation characteristics of the summer months are, for that path, more like the ones observed during the rest of the year.

Also given in Figure 13 (lower graph), are the offsets between the annual and worst month distributions. These are presented for completeness and must be viewed with a certain amount of caution since the length of record is statistically very short. The range of offsets is greater, but as

in Figure 13 (upper graph), the trend is the same, at least for the paths Lacy-Warwick-Cracroft. This is because the fading during the worst month is quite similar but more pronounced than the fading observed during each of the other months of the summer period. This is not the case on the path Cracroft-Vanderbilt: in contrast to Figure 13 (upper graph), the tail ratio takes on a much greater absolute value than on the other paths.

Looking back at the plots of Figure 7 to 11, one can observe that the fading tends to get worse for the more southern paths. As will be shown in the next section, the link Vanderbilt-Iqaluit, the most northern path, was very "solid" during the troublesome summer period. These latitudinal features may be to some extent dependent on the different temperature characteristics observed along the paths and discussed in section 5.

Of these paths, the one from Cracroft has the least severe characteristics of annual fade depth. Part of this could be attributed to the relatively large grazing angle (see Table 2) at the surface reflection point if transmission was not horizontally polarized. A large value of grazing angle helps reduce the magnitude of the sea surface reflected wave and therefore the degree of interaction with the direct wave [Boithias, 1983]. However, this effect is much more important for a vertically polarized transmission than a horizontal one. Paradoxically, the very similar path Warwick-Cracroft, which is vertically polarized, does not show better fade characteristics. The "latitude" effect discussed above possibly places the southern path in a more severe fading environment. Conversely, the paths from Cracroft to Iqaluit, even though having in one case a horizontal polarization and in the other a lower grazing angle, may rather be favoured by a more gentle climate. To make the fading comparisons more exact, further analysis could be carried out through a path parameter normalization. This is an analytical approach by which the fading is weighted according to path variables such as path length, inclination, and grazing angle.

6.4 Partial statistics for the paths Vanderbilt-Iqaluit and Kakkiviak-Warwick

The links Vanderbilt-Iqaluit and Kakkiviak-Warwick, the two end links of the repeater chain, suffered from the equipment problems discussed in section 4 and therefore could not be thoroughly analyzed.

The statistics for the Vanderbilt-Iqaluit path, which is the shortest path in the relay system, are presented in Annexes A and B, Figures A4 and B4 respectively. For this path, many corrections of the types described in section 4 were applied to the raw data before generating the statistics. After analysis, it was found that by doing so the error magnitude involved was almost of the same order as the fade depth being measured. Most of the analysis was therefore rejected. What became obvious however is that no deep fading was observed on the path. The period July to November 1987 contained the most reliable set of data for this path and those were used to generate the distributions shown in Figure 14. The data for September 1987 were used for the worst month curve. In both cases, the absence of deep fading is apparent and contrasts with the results obtained on the other paths. Beside being shorter this path has a very high path inclination angle (see Table 2), and a low Fresnel clearance (Figure 2), which may well be the prime and dominant factor. As we will soon see, the other path which did not have the normal clearance also seems to have been favoured by less severe fading characteristics.

The statistics for the Kakkiviak-Warwick path, which is the longest path in the relay system, are presented in Annexes A and B, Figures A5 and B5 respectively. Unlike the Iqaluit data, the statistics for this path were generated without applying any correction or modification to the raw data. The equipment problem occurred on September 17th 1986 (see Figure B5) and caused a 22 dB drop in received signal strength. On October 12th 1986, the communication was lost because of an equipment problem, this time at Cape Warwick. This latter site was visited on March 15th, 1987, and the communication re-established at that time. The site on Cape Kakkiviak could never be visited during the entire recording period since helicopter transportation across the Hudson Strait could not be arranged. In the data shown, the normal signal level is usually discernible and follows a fairly continuous base line established above the receiver noise level. At these low levels, the poor sampling resolution displays the quantization thresholds and the signal may appear more irregular than it really is.

The cumulative distribution of power received during the March to November period is shown in Figure 15. The distribution curve is limited at the low end by the noise floor of the receiver. From there, and until it reaches about the median level, a lack of resolution due to low signal-to-noise ratio makes the distribution rather uncertain. The first curvature around the 2% probability level is about 1.5 dB above the noise level, high enough to be distinguished from the noise itself, and may indicate the beginning of the tail of the distribution; otherwise the tail does not show up at all in the plot. This strongly suggests that fading is less acute here than on the next three northern paths.

The main identifiable feature however is the 23 dB increase above the median. Many facts indicate that it is being caused by a real propagation effect, not by equipment anomaly, although its magnitude may be somewhat inaccurate. The periods of activity and non-activity follow the same pattern as for the other paths; the bulk of the enhancement occurs in the June-September period. Note that at the beginning of the experiment when the system was in the best condition, strong enhancement was registered. On September 15th, 1986 (Figure B5), the signal was 8.7 dB above the predicted long term median and 13.2 dB above the median of the September 13-17 period. This strong and prolonged behaviour lasted over 2 hours, and the peak strength reached was 4.3 dB higher than the hourly median shown. There is also similarity of the results over the same months of different years. In Figure B5, compare data for September-October 1986 to September-October 1987 and notice the active period in September, followed by a calm period.

6.5 Comparison of the paths Kakkiviak-Warwick and Lacy-Warwick

There is a high degree of negative correlation between the Kakkiviak-Warwick enhancements and the deep fades observed on the path Lacy Island to Cape Warwick. This is illustrated in Figure 16. On the 2nd of June, 1987, while a strong increase of power was received from Kakkiviak, the almost collinear but shorter path suffered a deep fade. This was repeated on the 6th, 8th, 10th, 27th and with less intensity on the 18th and 19th. June 1987 is in no way an exception. Almost if not all months highlight that same characteristic between these two paths. The summer months are particularly revealing.

These combined characteristics of strong signal enhancement and low fade depth under earth blockage have previously been observed with comparable magnitude on grazing and shorter paths in the central

Arctic [Butler et al., 1984, 1985]. The strong systematic fade/enhancement duality bears very close similarity with observations made on a 7 GHz, 60 km radio-relay link in Senegal and described by Hautefeuille et al. [1980]. To the author's knowledge, however, this is for the first time that this effect has been so explicitly observed and reported at UHF.

The mechanism behind the phenomenon may well be due, as in the Senegal case, to the presence of an abnormal refractive layer (such as a duct) in proximity to the paths. The enhancements last for hours or days, suggesting that the atmospheric refractive index may become so consistently negative (superrefractive) that the earth appears almost flat to the radio waves which then propagate unobstructed from Kakkiviak to Warwick. But widely spread superrefractivity is unlikely since flattening the earth alone should not fade the signal received from Lacy Island; at least some of the fades resulting there must originate from the presence of an abnormal refractive layer, not just a k-enhancement, in proximity to that path. Unlike the Senegal path, no refractivity measurements were made to support the hypothesis that a layer may have developed near the sea surface (surface duct) or at some higher height (elevated-surface duct). The geometry of the links suggests that the direct wave coming from Kakkiviak would be focussed even if the layer did not extend much below the first 364 m (this is the altitude of the receiving site) above the sea surface; whereas the wave coming from Lacy Island may be trapped between the ground and the base of the layer without ever reaching the receiver. In the case of a surface duct, the assumption is that the wave from Kakkiviak is favourably reflected upward toward the receiver, whereas the Lacy wave would follow the duct path and be a captive of it. In both cases, the receiver for the Lacy signal finds itself in a shadow zone due to the presence of the duct.

Besides the phenomenon itself, what is most worth noting is its frequent occurrence. As is seen in Figure 15, enhancements of 10 dB or more occurred during no less than 10% of the 9-month observation period. Assuming generously that the first 20 dB above the median are due to a reduction of the diffraction loss (15.6 dB predicted plus an additional 4.5 dB as was estimated in section 6.1), pure ducting occurred for about 1% of the time, with a magnitude up to 5 dB over the free space level.

6.6 Tidal effect

Frobisher Bay is over 230 km long and 40 km wide at the mouth, narrowing to 20 km towards its head. The configuration of the bay has a funnelling effect, so that the harbour of the settlement of Iqaluit at the bay's head experiences a twice-daily (semi-diurnal) tidal range of 7-11 m [Hurtig Publishers, 1985]. In the bay, there are small islands which appear only at low tide, and the outline of the head of the bay varies somewhat with the state of the tide [Dunbar and Greenaway, 1956]. At the entrance to the Strait, near Lacy Island, the greatest range is of the same order [Fairbridge, 1966].

Tides are caused by the physics of the solar system, in particular the sun-earth-moon system. Tides are waves; the typical period is 12 hours and 25 minutes and the wavelength is about half the circumference of the earth (ideally 21000 km) [Fairbridge, 1966]. There may be one high and one low tide per day (diurnal tides) or double this (semi-diurnal) depending on the location on the earth. The two highs and two lows each day may not be identical in height. Both the times and heights of high and low tides

change every day. On the average, the high tide is observed about fifty minutes later everyday. The range of the tide varies markedly with season. Maximum ranges occur near the time of the solstices - in June and December. This is also the time of maximum diurnal inequality (difference in height of successive highs).

On paths over sea, the phase delay from the reflected path varies with tidal changes and interferes with the direct component. Depending on the phase changes, this multipath problem can become serious. According to Hall [1979] there are cases at UHF where changes in field strength of more than 40 dB have been reported and attributed to tidal effects.

The phase delay changes, as determined by the present link geometry and by assumption of a widely spread 11-metre tide change, are shown in Table 2 (values in parentheses). On all paths these changes are much less than a wavelength (2π radians), but are greatest on the path Cracroft-Vanderbilt. Figure 17 shows the small variations (up to 1.5 dB) effectively observed on this path, at times when there was no other propagation disturbance to mask the effect and when the reflections were highly specular. Figure 17 should be compared with Figure B3 to get a better perspective of this phenomenon.

Tidal effect was also observed but with lesser magnitude on the paths Vanderbilt-Iqaluit and Warwick-Cracroft. The effect seems to have been absent from the Lacy data, although a Fourier transform of the data could reveal its presence. It is thought that the reflection area for this path, which happens to be in the open sea, may have a smaller tidal range than those within Frobisher Bay.

6.7 Diurnal variation

Diurnal variations were not analyzed thoroughly. Partial results are shown in Figure 18 for the path Lacy Island to Cape Warwick. Very similar results were obtained on the path Warwick-Cracroft but are not detailed here.

The main characteristic which appears in Figure 18 is the lack of any pronounced diurnal variation around the median. A diurnal amplitude of 1 dB is observed in August and September, but without well defined temporal pattern. As for the cumulative distribution data, the variations are most important during the summer months (June to September inclusive) whereas in winter, the curves are almost perfectly flat. This latter characteristic is rather similar to that in arctic maritime regions [Butler, 1985] but variation, or rather lack of variation in summer, appears to be unique to the present observations. Diurnal amplitude could possibly vary more if measured at either end of the distribution rather than at the median.

7. CONCLUSIONS

The coastal regions of northern Labrador and south Baffin Island are areas of harsh climate where wind, icing, and fog conditions are among the most severe in Canada. Weather variability from year to year is high and the 15-month observation period was marked by precipitation irregularity, much colder than normal temperature, and numerous blizzards.

The signal strengths received across five UHF paths in the Frobisher Bay and Resolution Island area were monitored to study the reliability of

transmission. All paths were over sea, with lengths in the range 90 to 182 km. Radio propagation conditions were varied but generally characterized by a bi-seasonal division: a rather inactive prolonged winter and a four-month quite active summer (June to September inclusive).

Except for the low clearance paths, the cumulative distribution curves were highly asymmetrical around the median level axis. Below the median, a large part of the levels were contained within ±2 dB of the Rayleigh slope, with fade depth on the worst path not exceeding 34 dB at 0.01% (25.7 dB at 0.1%) annual probability; above, enhancement levels were confined within a 5 to 10 dB range, for 99.99% annual probability. Worst-month/worst-path fade depth exceeded 42 dB during 0.01% (31 dB during 0.1%) of the time.

As was originally observed on some paths in the central Arctic [Butler, 1985], the paths with low or no Fresnel clearance appear to have less severe fading characteristics (although only partial analysis could be carried out here also).

Ducting was frequently observed on most of the paths, despite low occurrence predicted on the basis of radiosonde measurements. On the two paths across the Hudson Strait, fades on one path were systematically correlated with enhancements on the other. This phenomenon was attributed to the presence of a superrefractive layer in proximity to the paths.

Up to 1.5 dB of tidal variations were observed on the paths within Frobisher Bay. Lack of pronounced diurnal variation around the median was observed on the two paths analyzed.

There seems to be a geographical dependence of the fading characteristics, with fading getting worse for the more southern paths.

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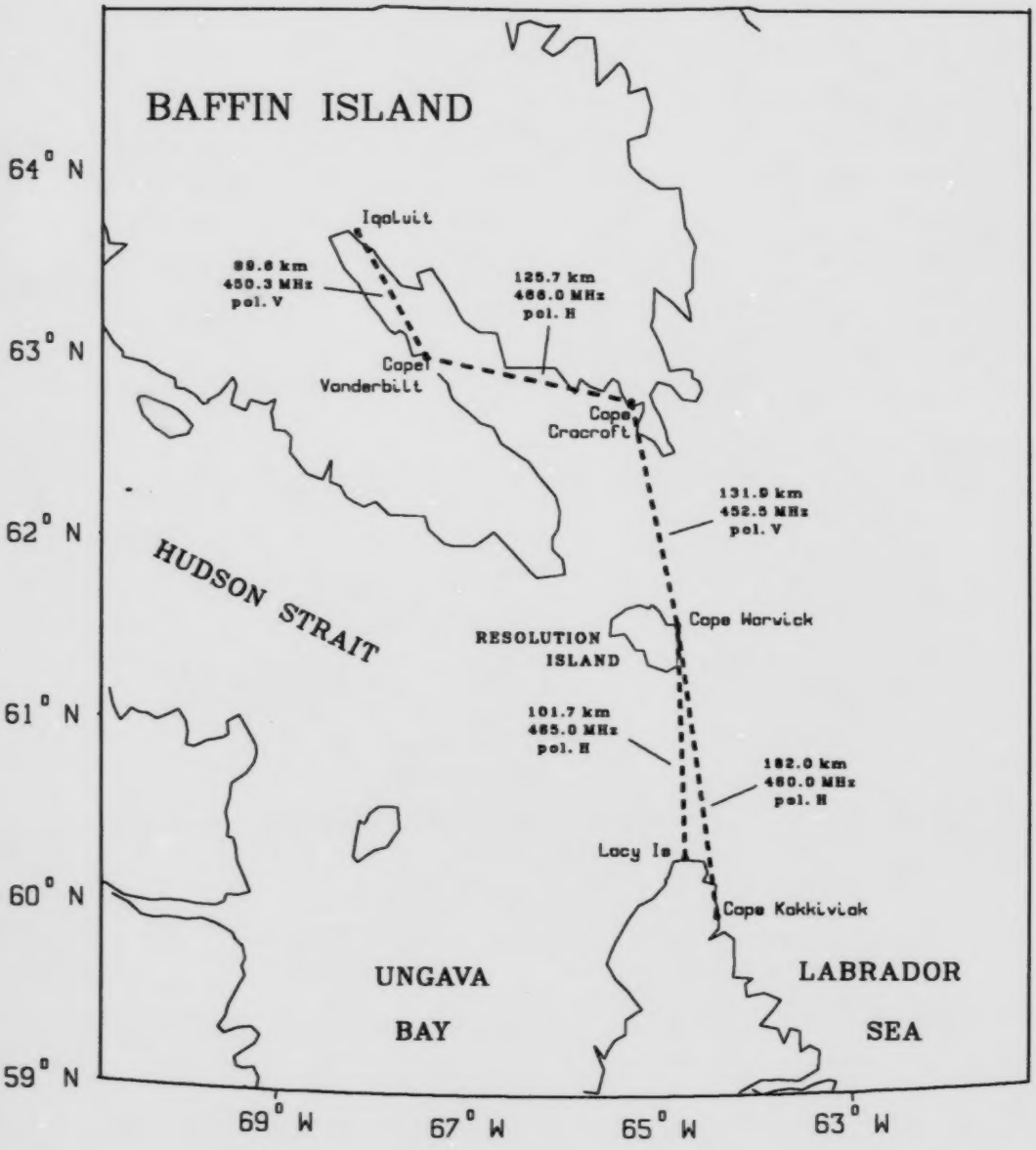

Fig. 1 The experimental region, showing equipment locations and propagation paths

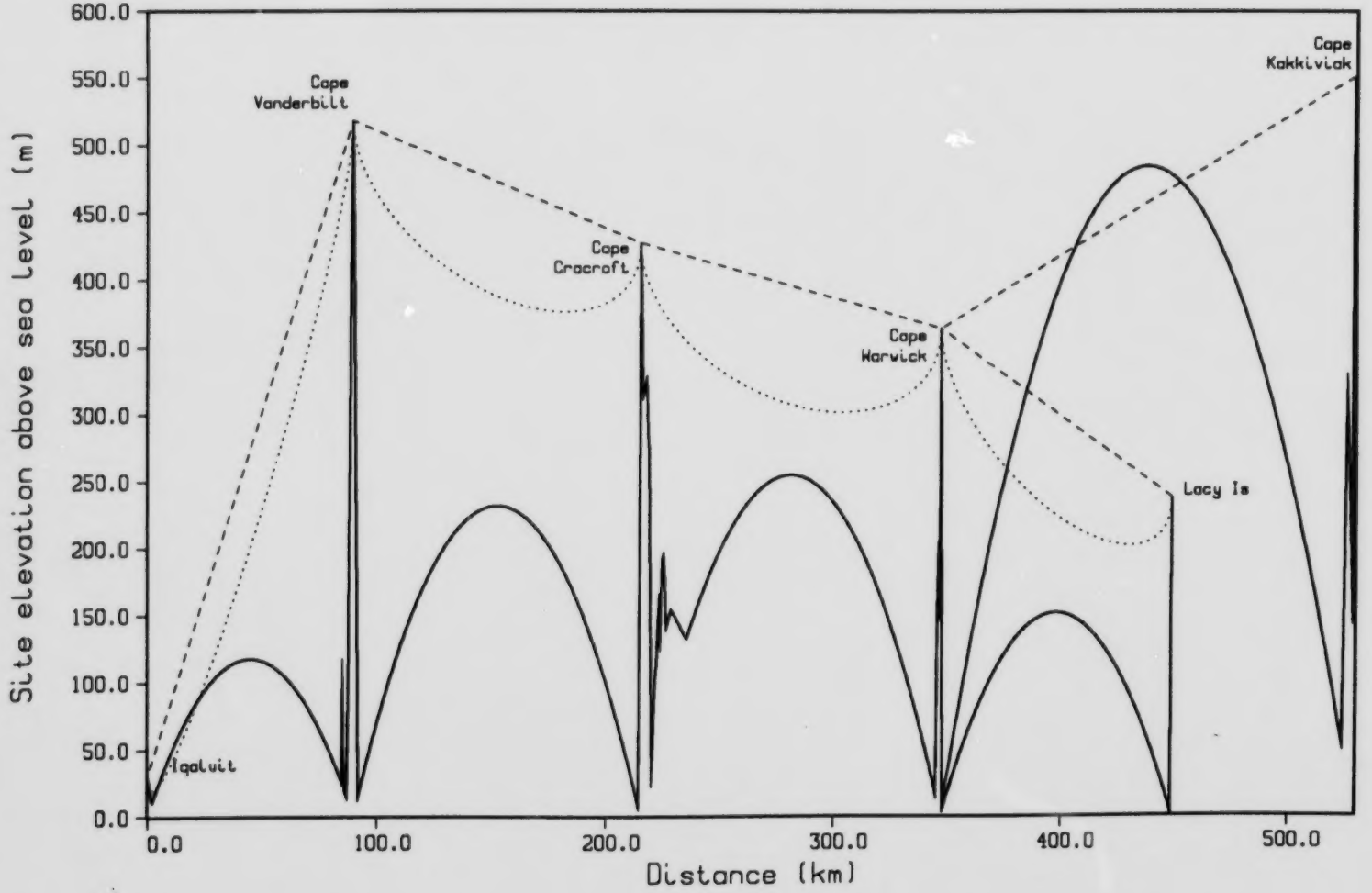

Fig. 2 Profiles of the five over-water paths, including four-thirds earth curvature and 0.6 Fresnel zone.

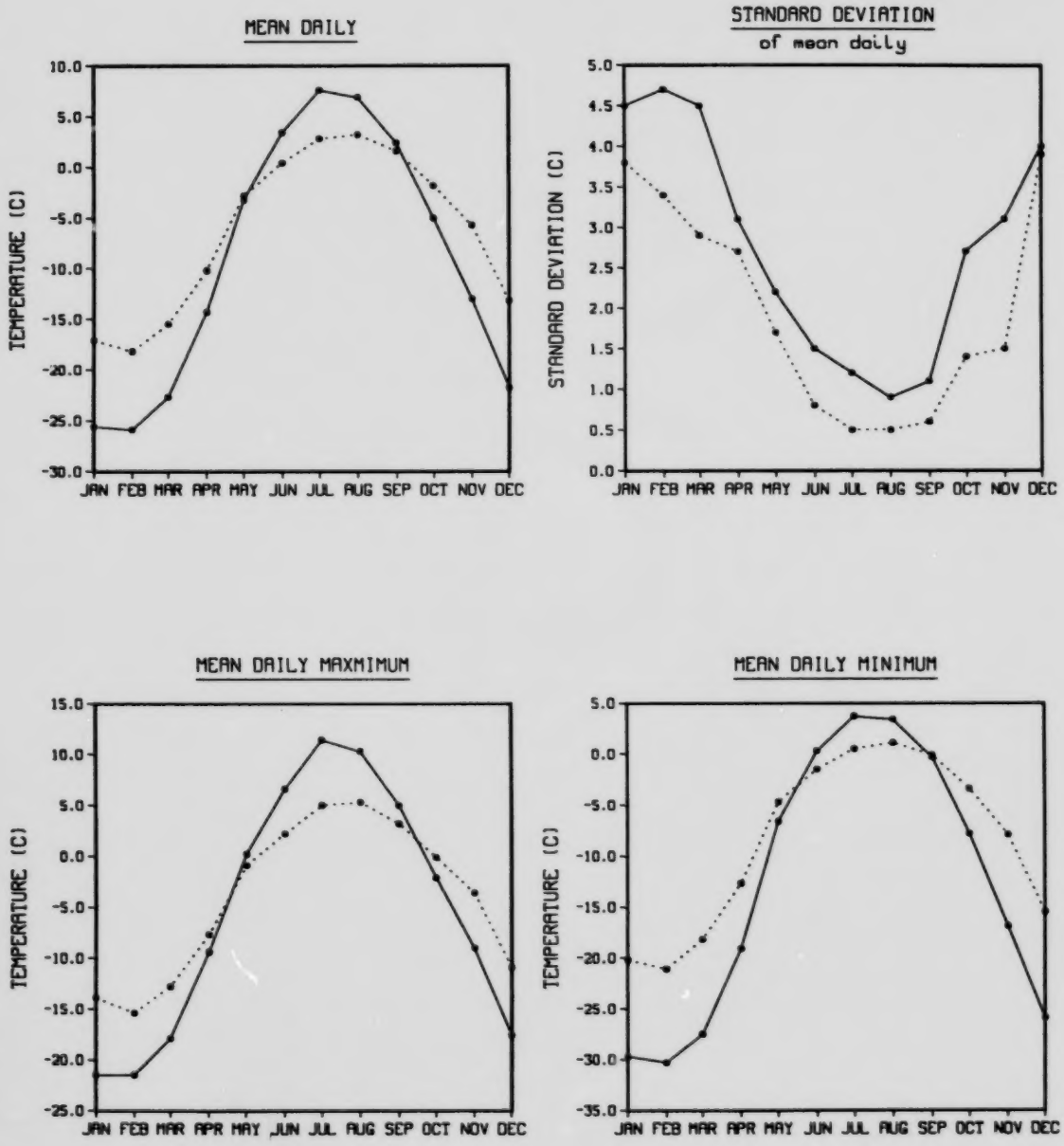

Fig. 3 Temperature statistics (Normal 1951-1980) for Iqaluit (solid lines) and Resolution Island (dotted lines). (after Environment Canada, 1982)

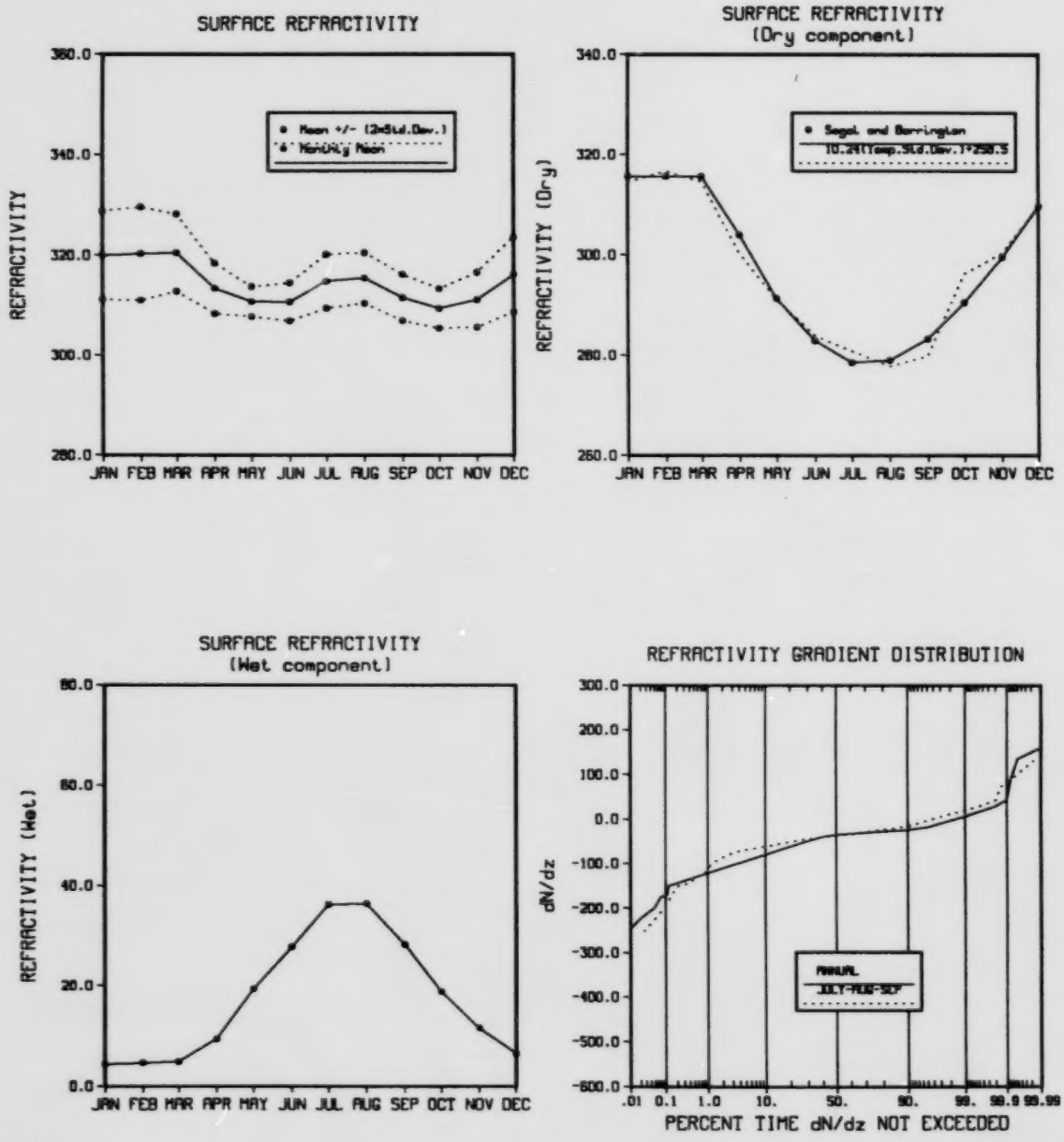

Fig. 4 Surface Refractivity data for Iqaluit.
(after Segal and Barrington, 1977)

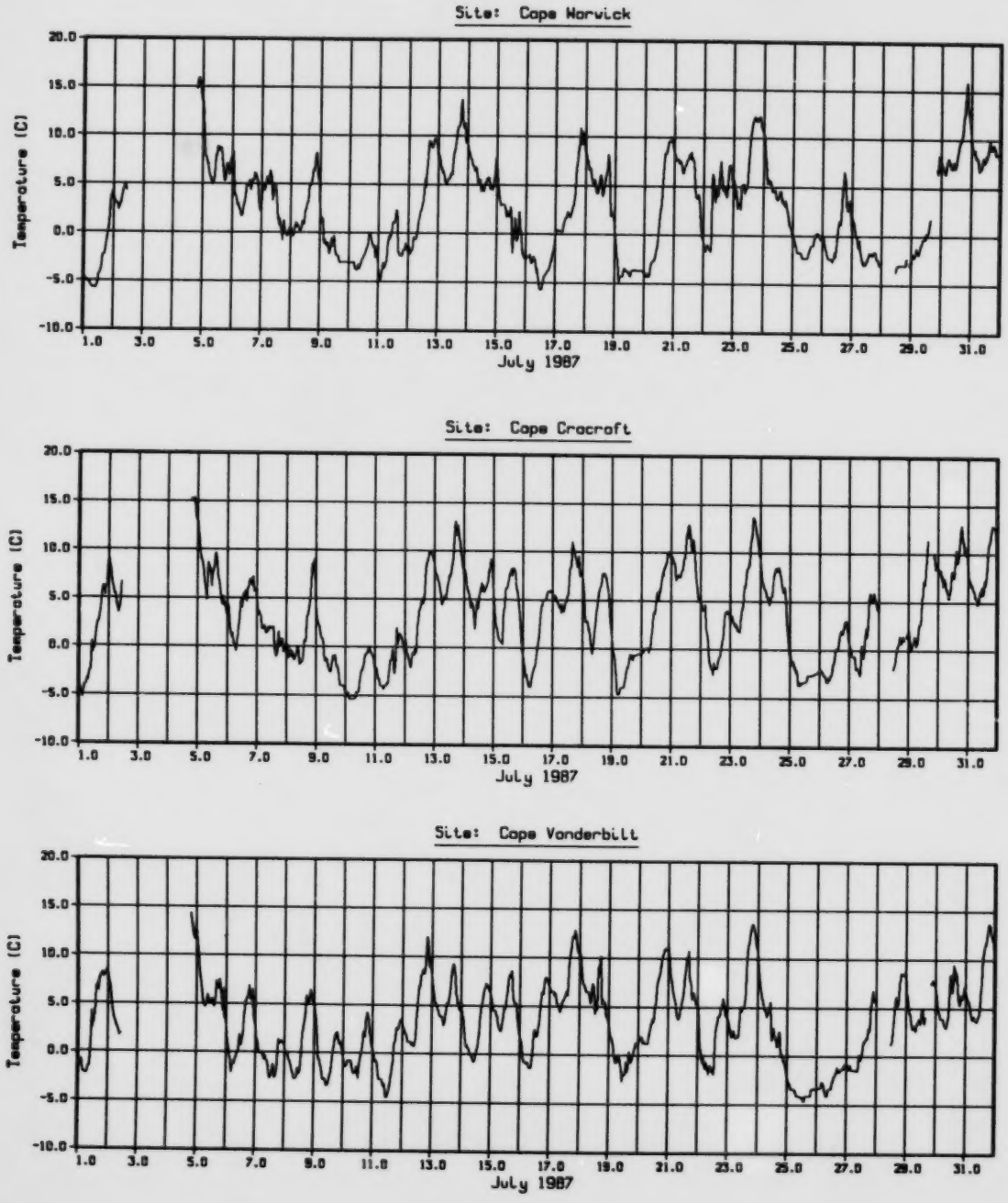

Fig. 5a Typical variation of the 30-minute mean temperature observed during the summer at 3 of the 6 experimental sites.

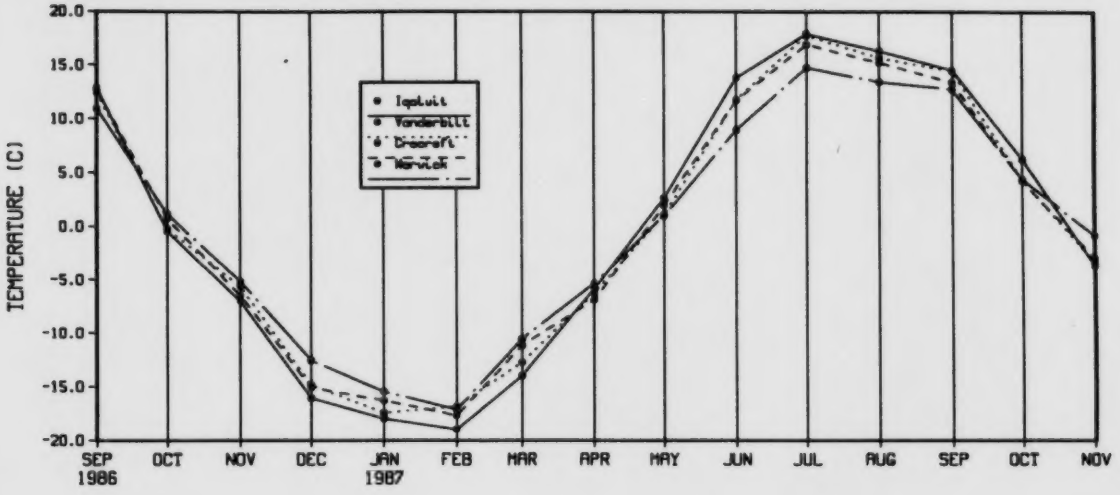

Fig. 5b Relative monthly mean temperature for the sites on Baffin and Resolution Islands; for each location, the monthly means have been offset by the site 15-month mean temperature.

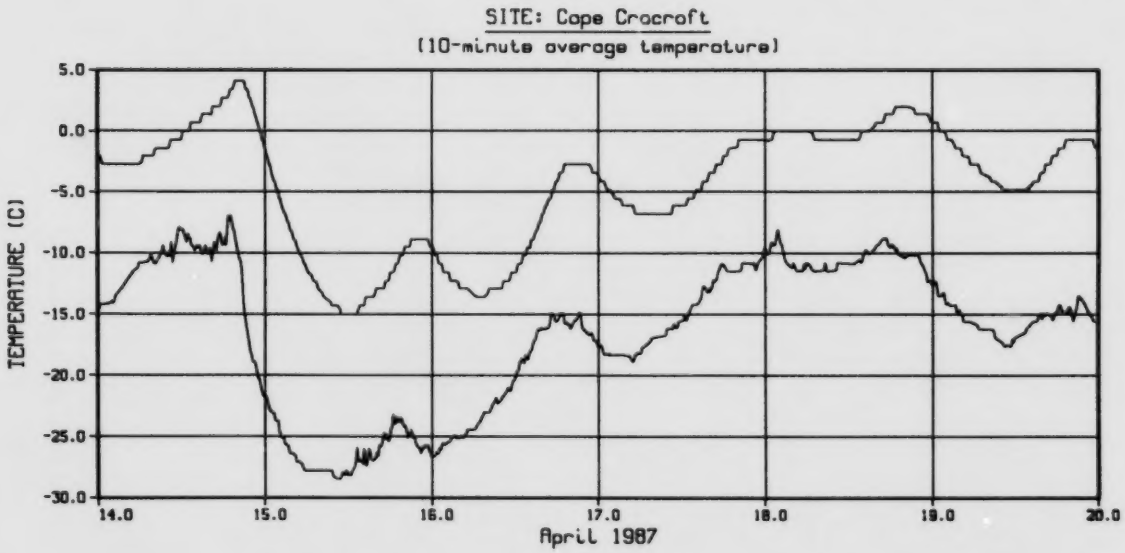

Fig. 6 Example showing the thermal differential and time-delay between the electronic equipment operating temperature (upper curve) and the site surface temperature (lower curve).

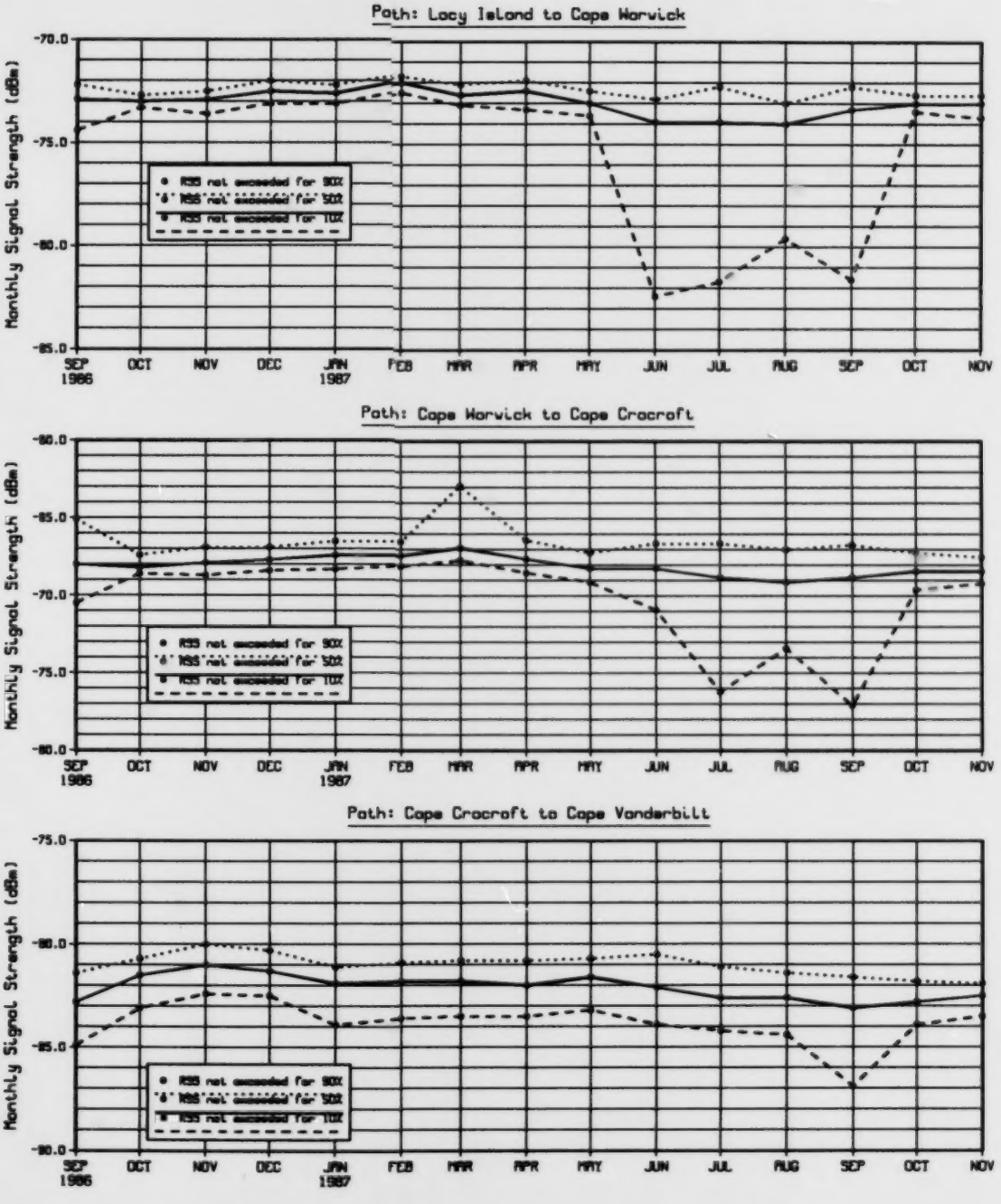

Fig. 7 Monthly 90, 50, and 10 percentiles of Received Signal Strength (RSS).

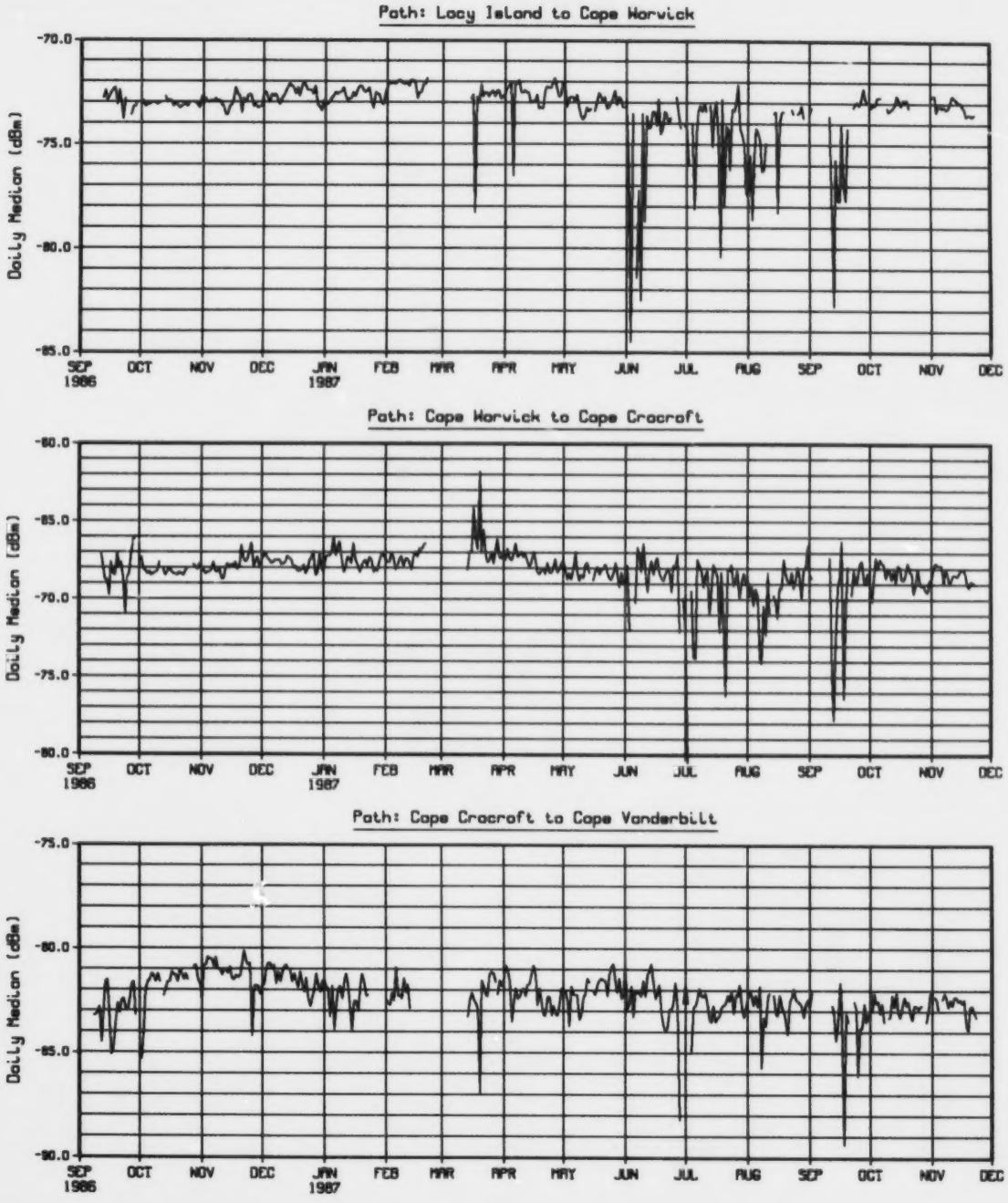

Fig. 8 Daily median values of received signal strength.

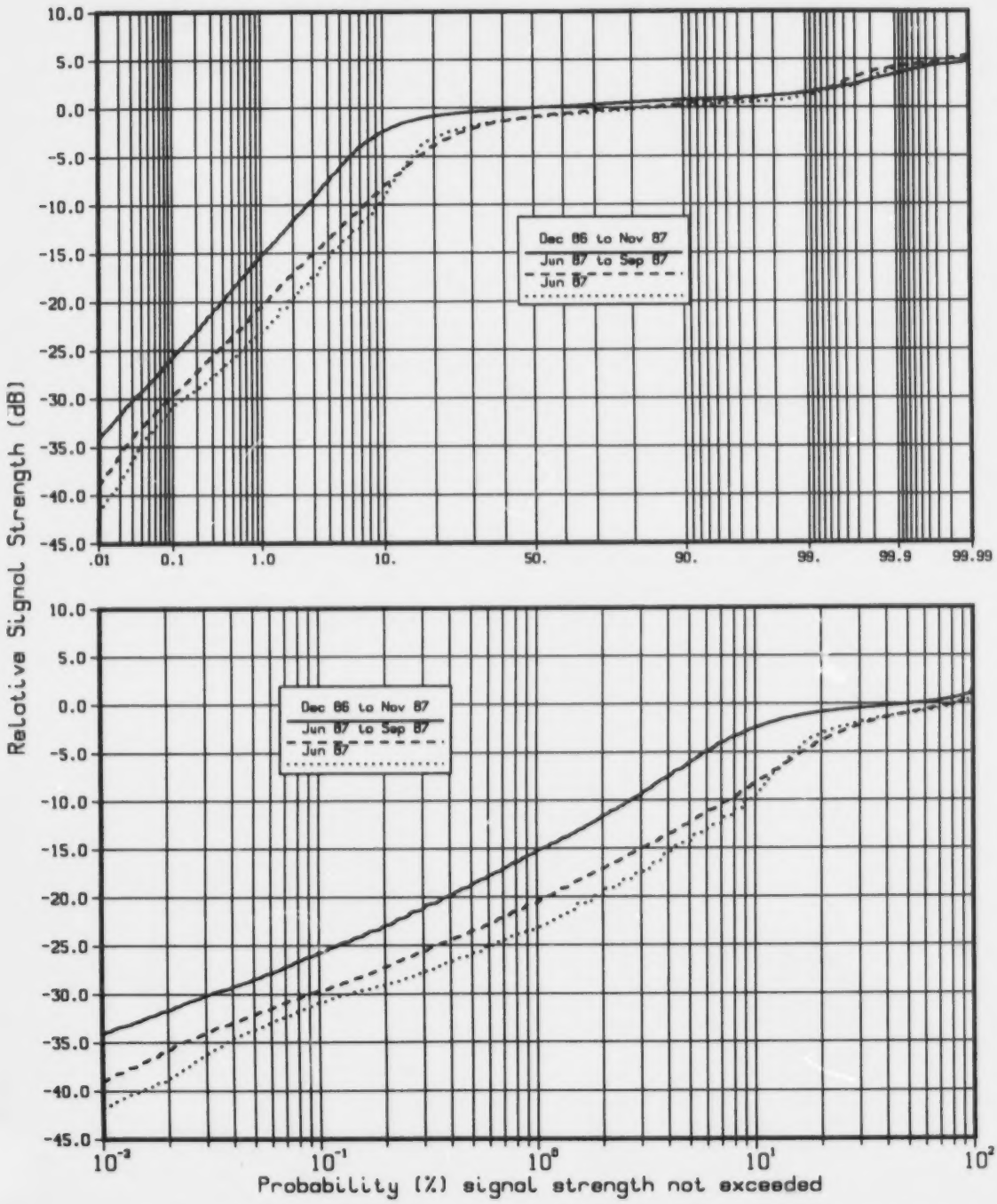

Fig. 9 Annual, seasonal, and worst month cumumlative distributions of power received at CAPE WARWICK from LACY ISLAND, relative to the annual median (72.9 dBm). Upper plot: Log-Gauss, Lower plot: Log-Log.

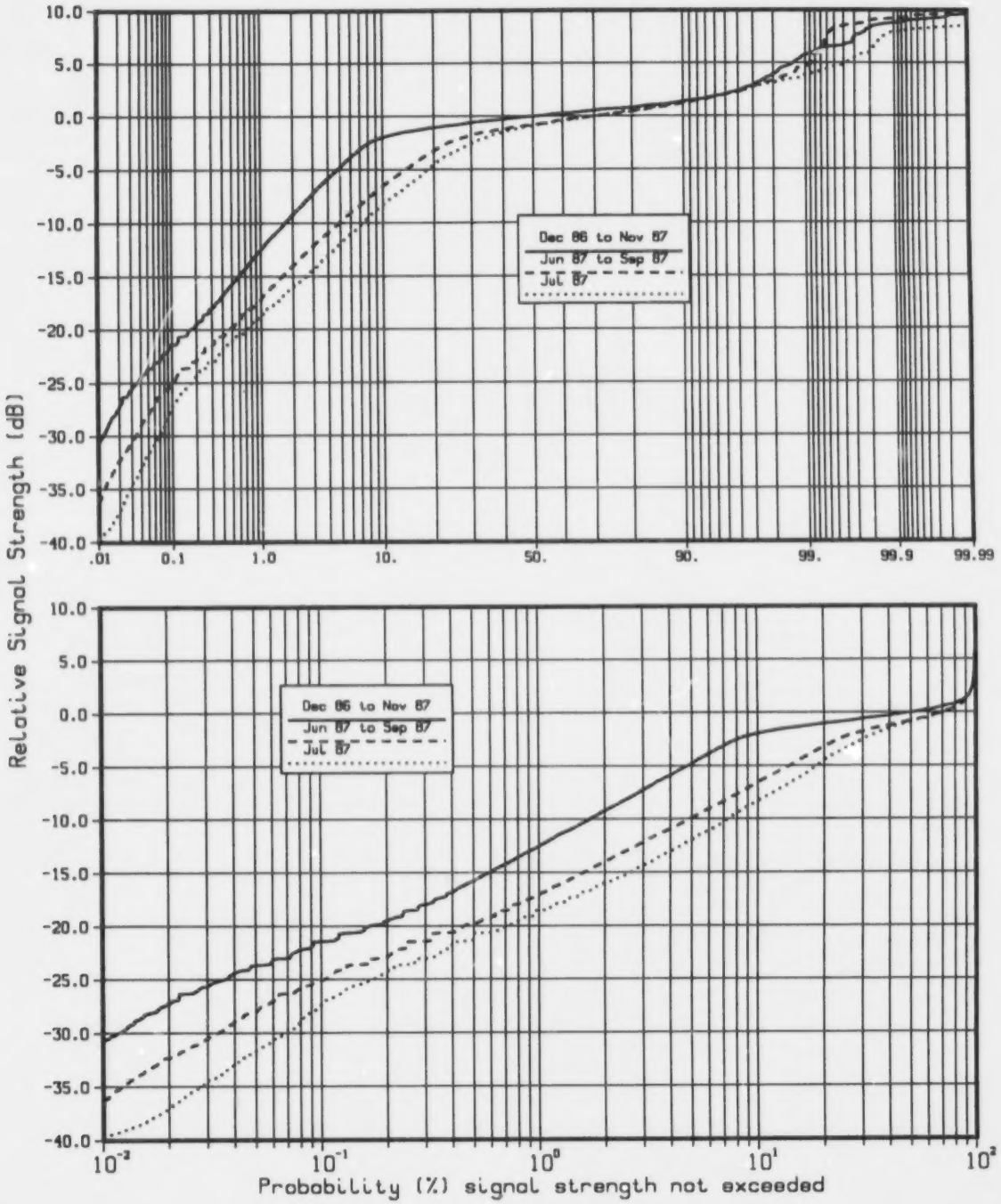

Fig. 10 Annual, seasonal, and worst month cumumlative distributions of power received at CAPE CRACROFT from CAPE WARWICK, relative to the annual median (-67.9 dBm). Upper plot: Log-Gauss, Lower plot: Log-Log.

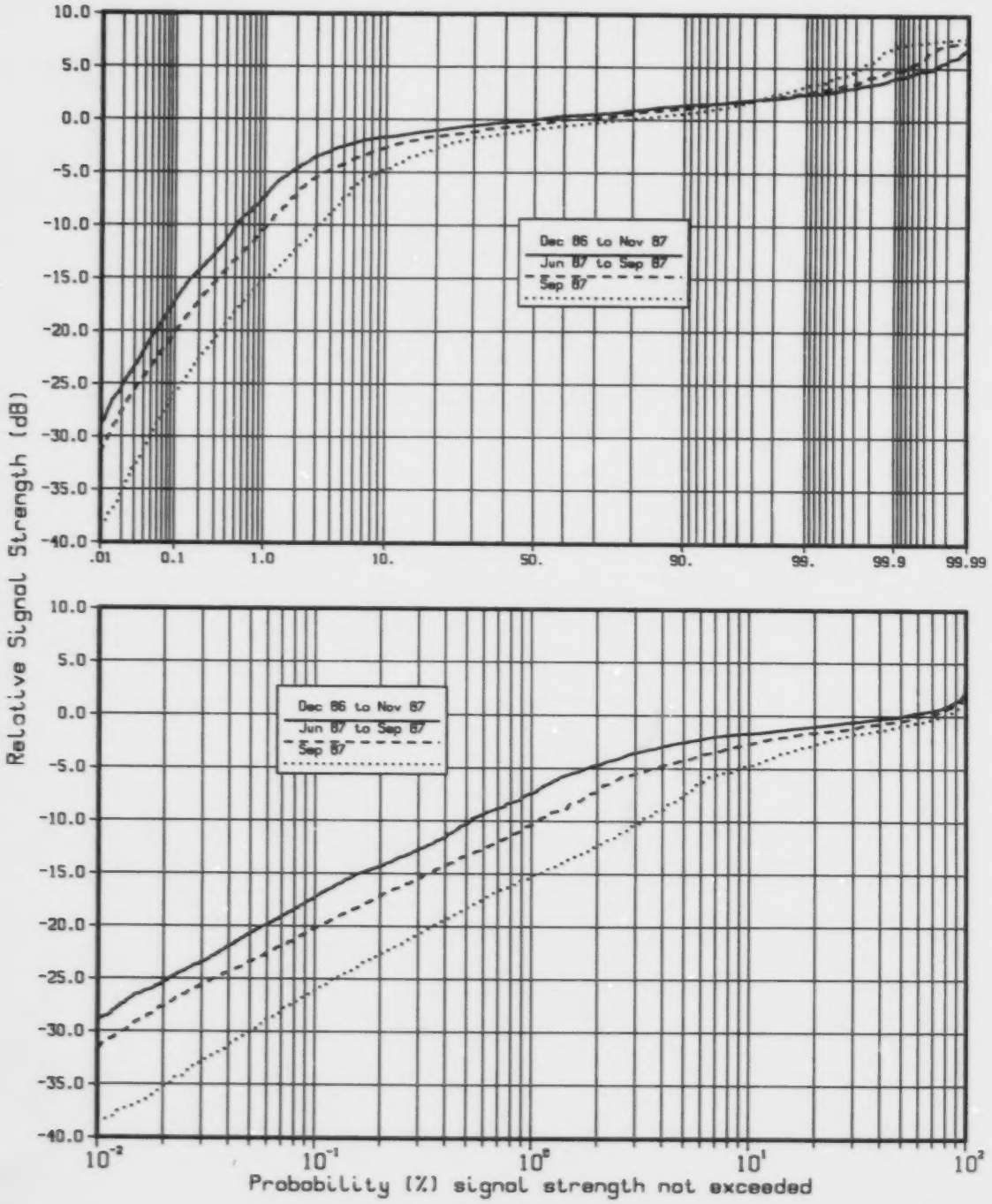

Fig. 11 Annual, seasonal, and worst month cumulative distributions of power received at CAPE VANDERBILT from CAPE CRACROFT, relative to the annual median (-82.2 dBm). Upper plot: Log-Gauss, Lower plot: Log-Log.

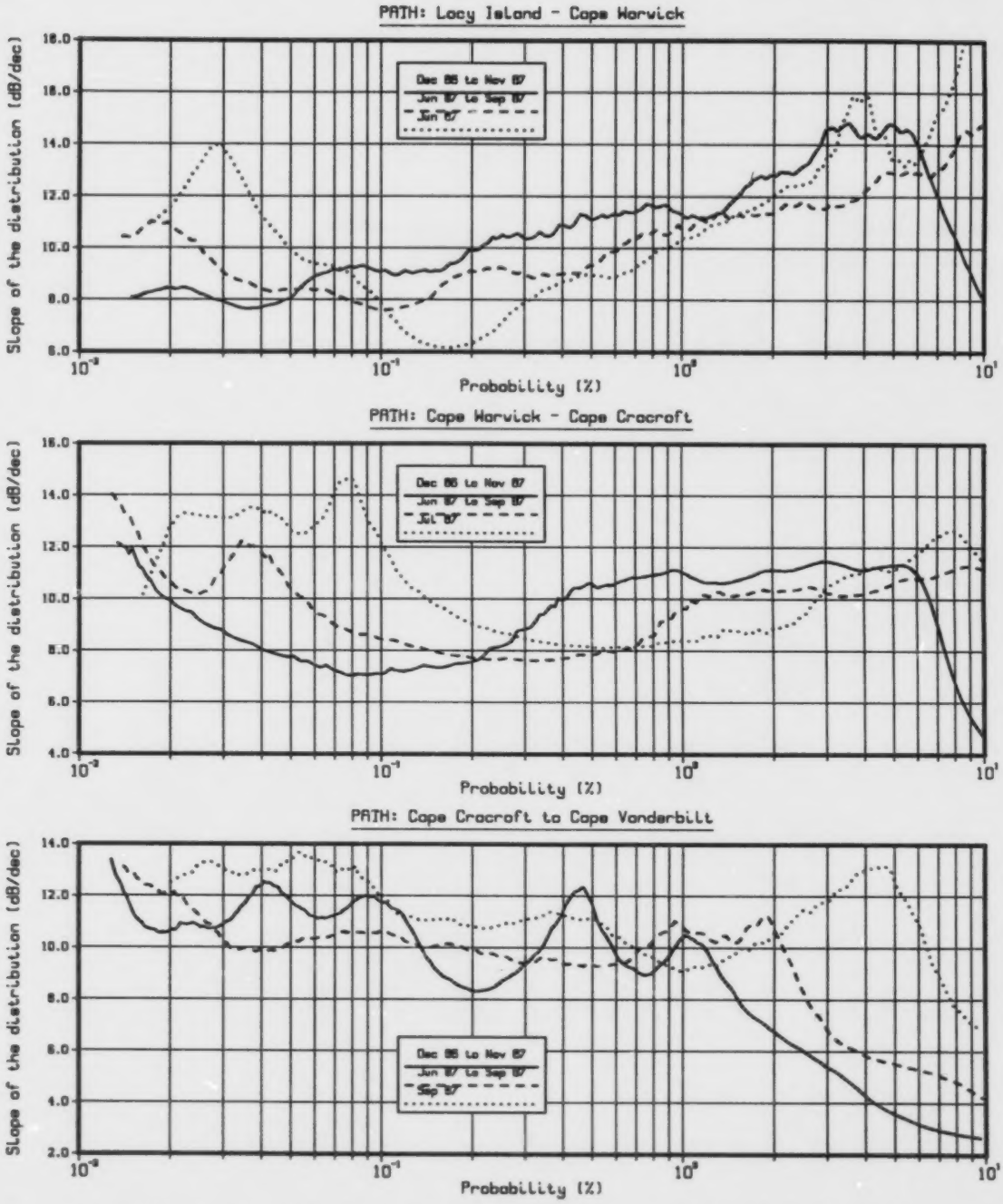
PATH: Lacy Island - Cape Warwick
Slope of the distribution (dB/dec)
Probability (%)
PATH: Cape Warwick - Cape Crocroft
Slope of the distribution (dB/dec)
Probability (%)
PATH: Cape Crocroft to Cape Vanderbilt
Slope of the distribution (dB/dec)
Probability (%)

Fig. 12 Slope variation of the tail portion of the annual, seasonal, and worst month cumulative distributions presented in Figures 9, 10, and 11.

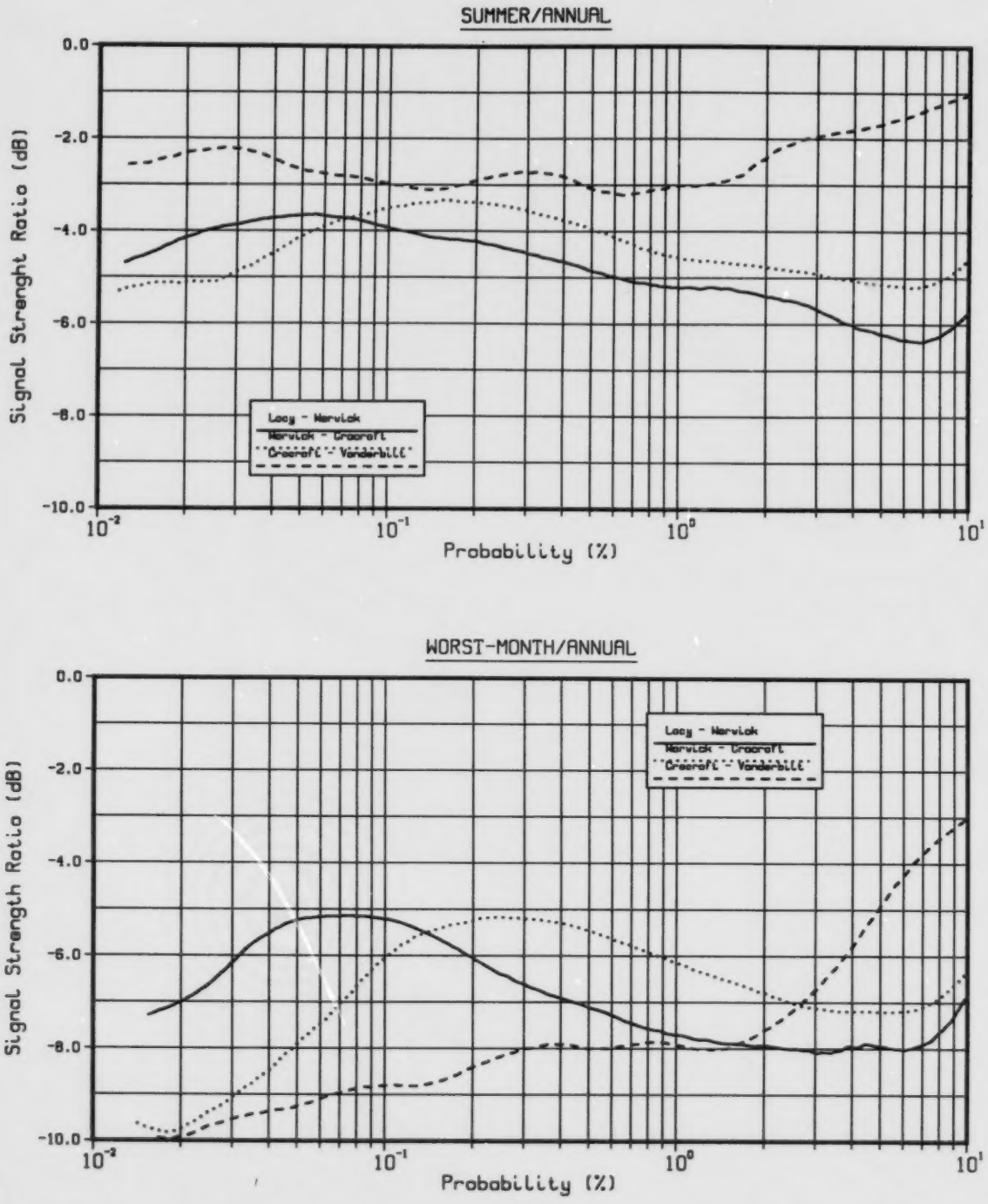

Fig. 13 Comparison between the tail portion of the Summer and Annual distributions (upper graph), Worst month and Annual distributions (lower graph), for the distribution sets presented in Figures 9, 10, and 11.

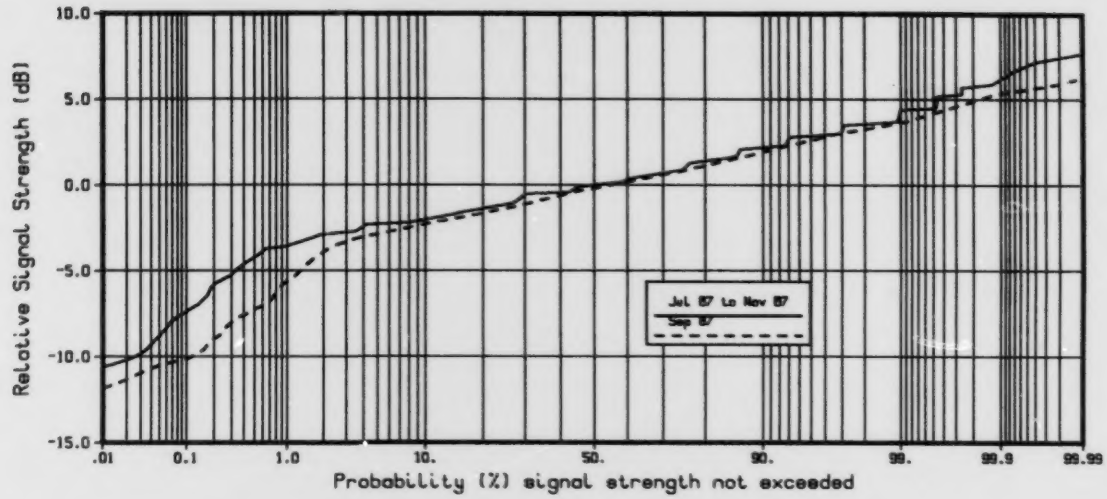

Fig. 14 Cumulative distributions of power received at IQALUIT from CAPE VANDERBILT, relative to the July-November 1987 median (-83.2 dBm).

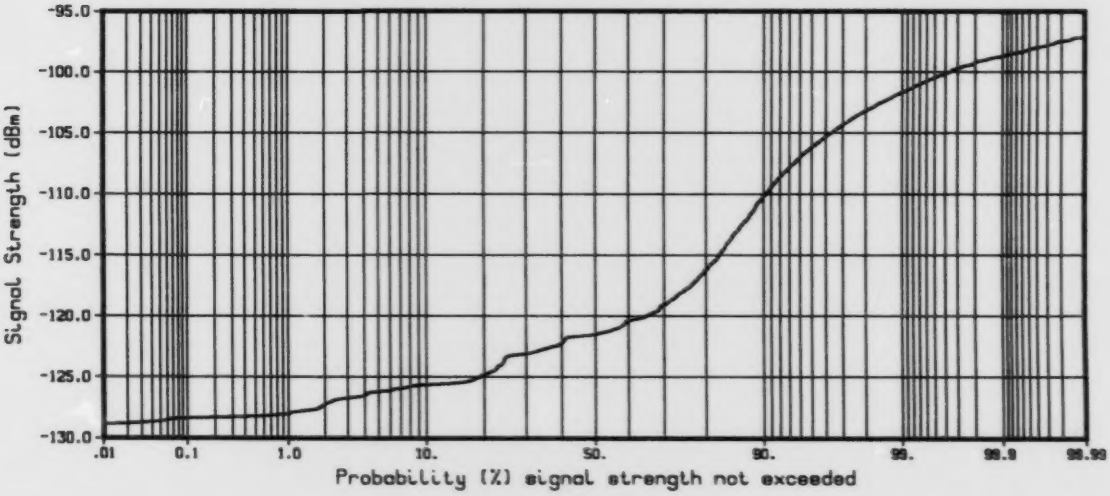

Fig. 15 Cumulative distribution of power received at CAPE WARWICK from CAPE KAKKIVIAK during the March-November 1987 period.

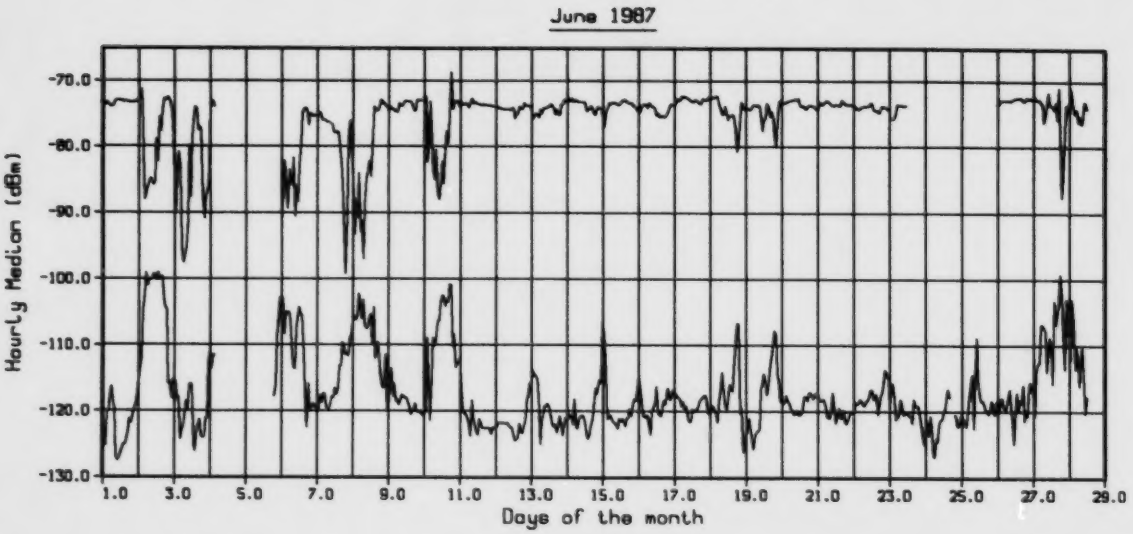

Fig. 16 Comparison of median variations during a selected period on paths from LACY IS. (upper curve) and CAPE KAKKIVIAK (lower curve) to CAPE WARWICK.

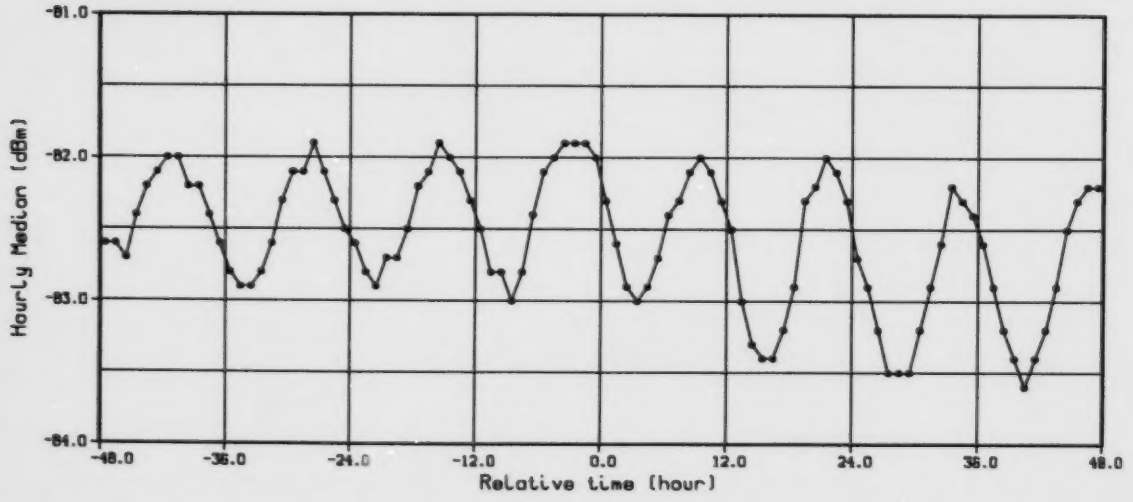

Fig. 17 Example of semi-diurnal tidal effect observed on the path CRACROFT to VANDERBILT; the time reference is November 3rd, 1987 at 0:01 UT.

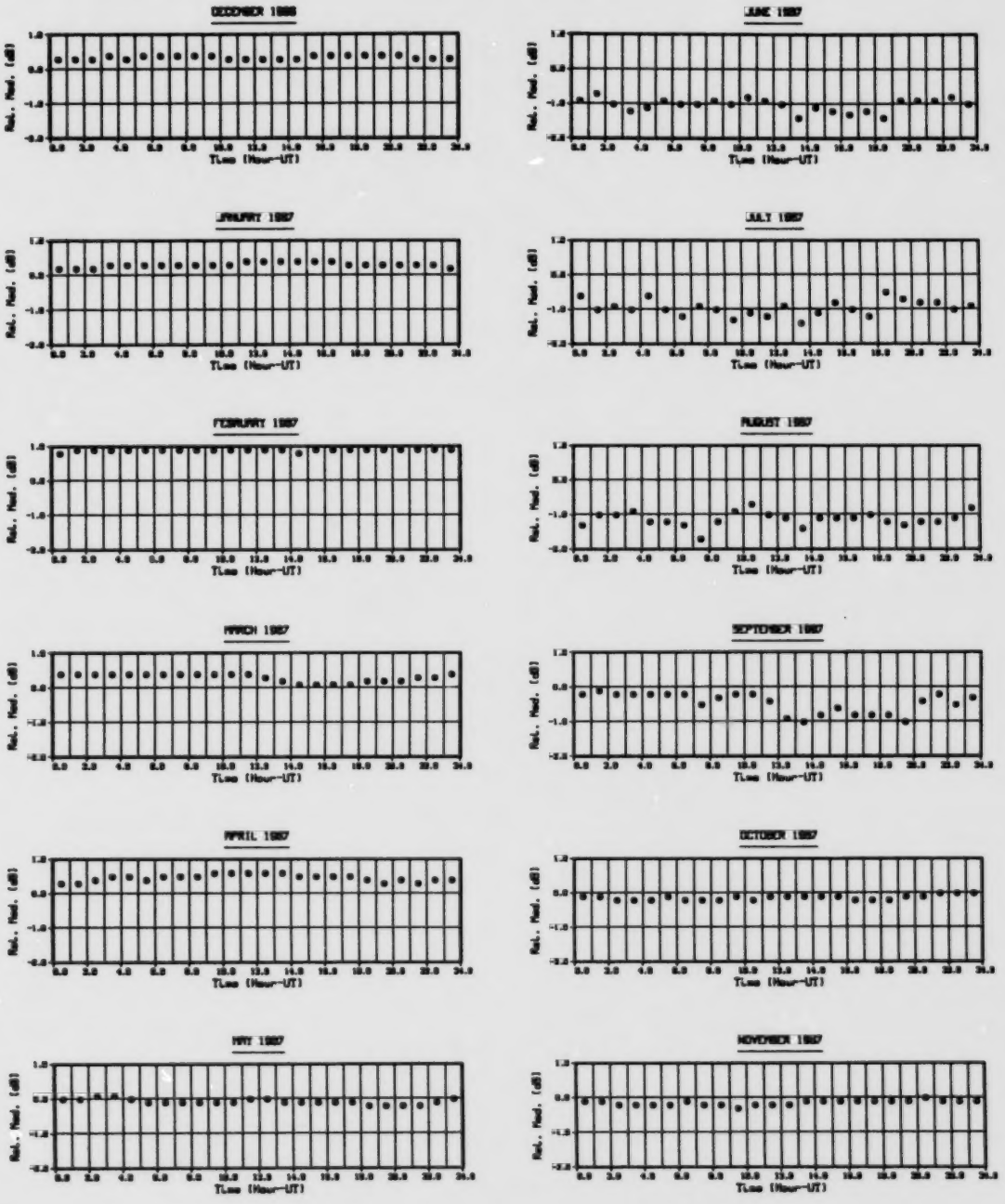

Fig. 18 Diurnal variations of median signal level, relative to the annual median (-72.9 dBm), path LACY ISLAND - CAPE WARWICK.

ANNEX "A"

MONTHLY CUMULATIVE DISTRIBUTIONS OF POWER RECEIVED

This annex is a graphical presentation of the monthly cumulative distributions of power received over each experimental path. The graphs cover the period September 1986 to November 1987. A Gaussian scale, expressed in percentage, is used as the abscissa. On the ordinate scale, the received power is expressed in decibels relative to 1 mW.

The monthly cumulative distributions are presented in the following order:

Fig.	PATH		
A1	Lacy Island	to	Cape Warwick
A2	Cape Warwick	to	Cape Cracroft
A3	Cape Cracroft	to	Cape Vanderbilt
A4	Cape Vanderbilt	to	Iqaluit
A5	Cape Kakkiviak	to	Cape Warwick

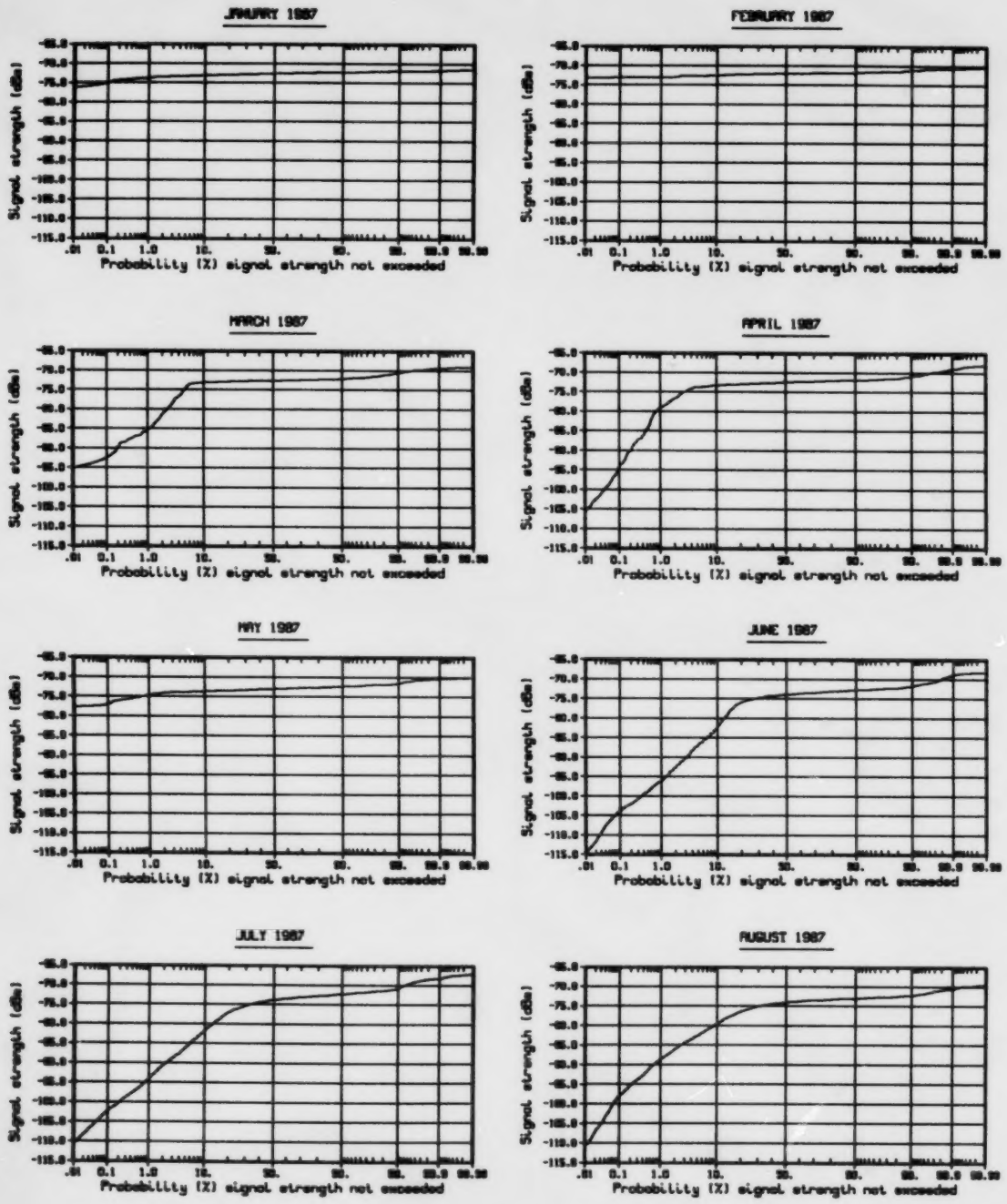

Fig. A1 Monthly cumulative distributions of power received.

LACY ISLAND - CAPE WARWICK (Page 1 of 2)

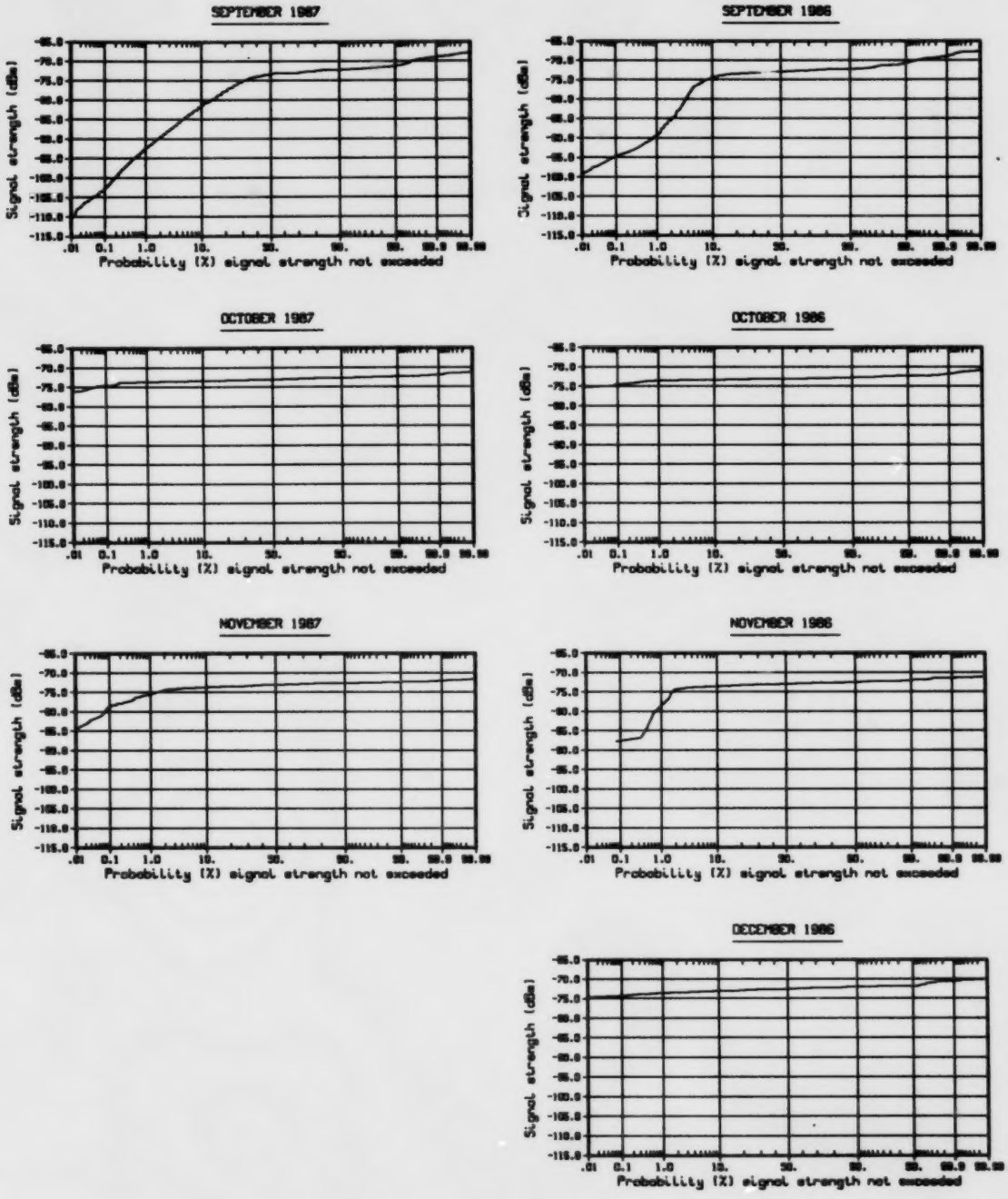

Fig. A1 Monthly cumulative distributions of power received.

LACY ISLAND - CAPE WARWICK (Page 2 of 2)

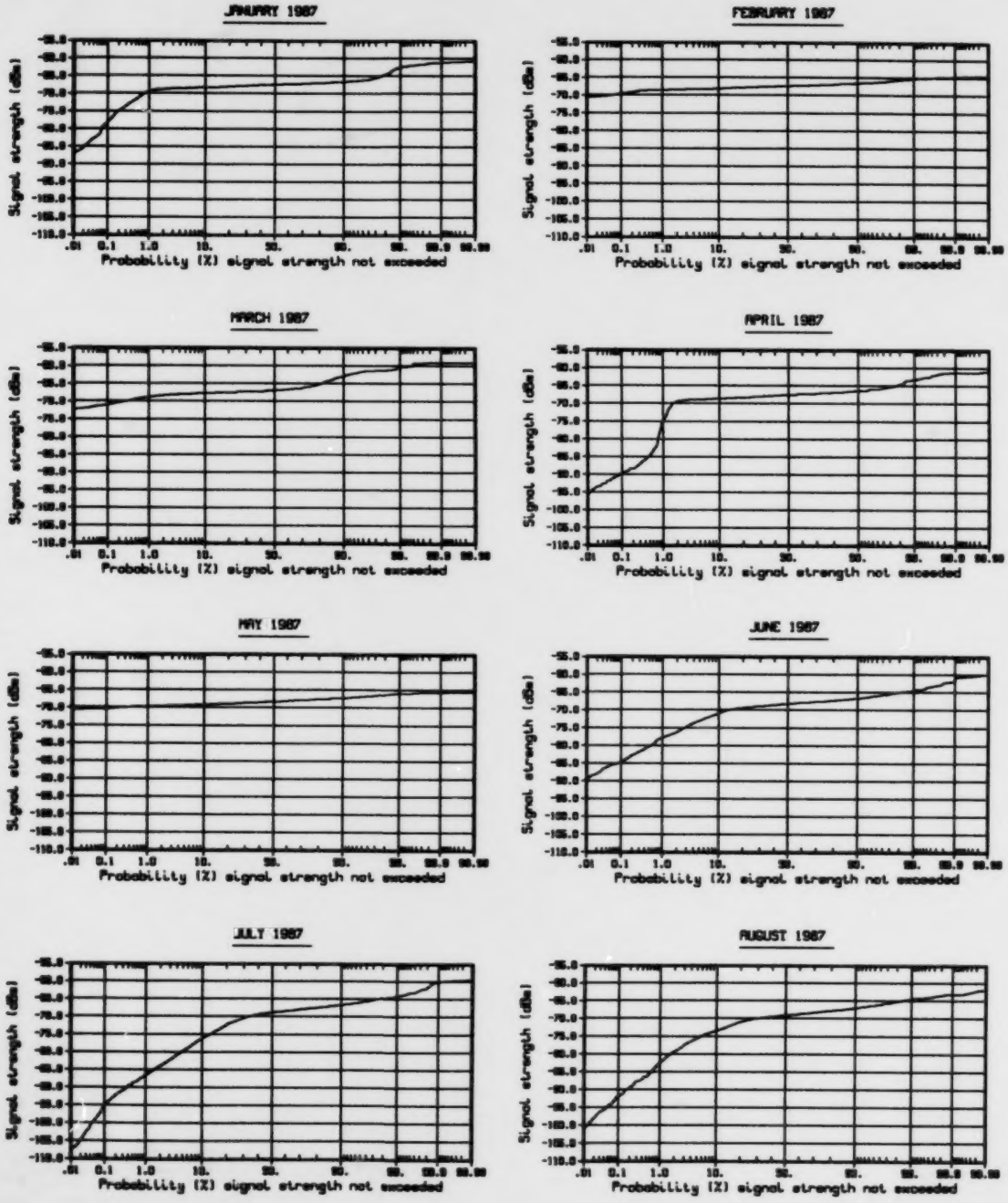

Fig. A2 Monthly cumulative distributions of power received.

CAPE WARWICK - CAPE CRACROFT (Page 1 of 2)

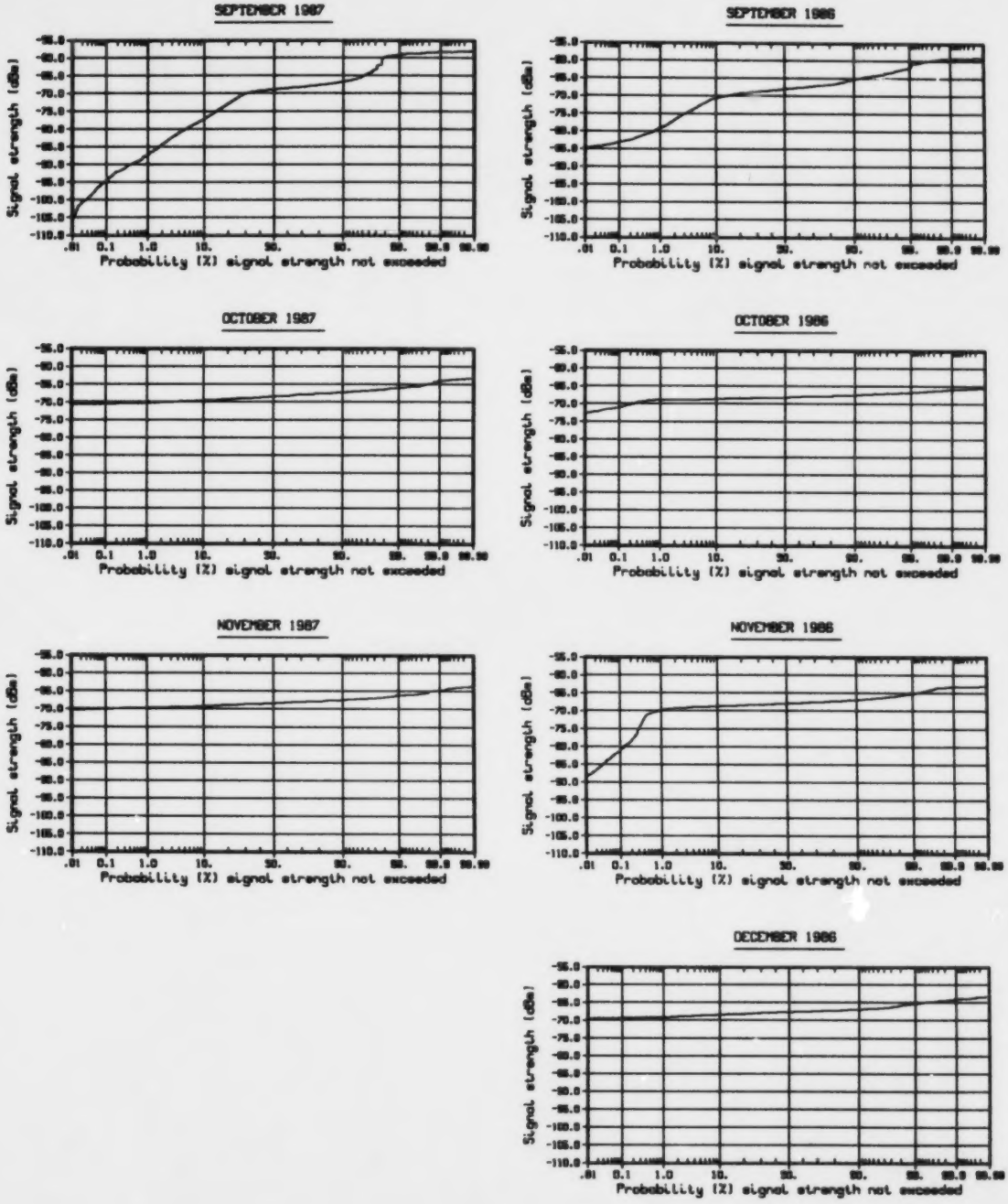

Fig. A2 Monthly cumulative distributions of power received.

CAPE WARWICK - CAPE CRACROFT (Page 2 of 2)

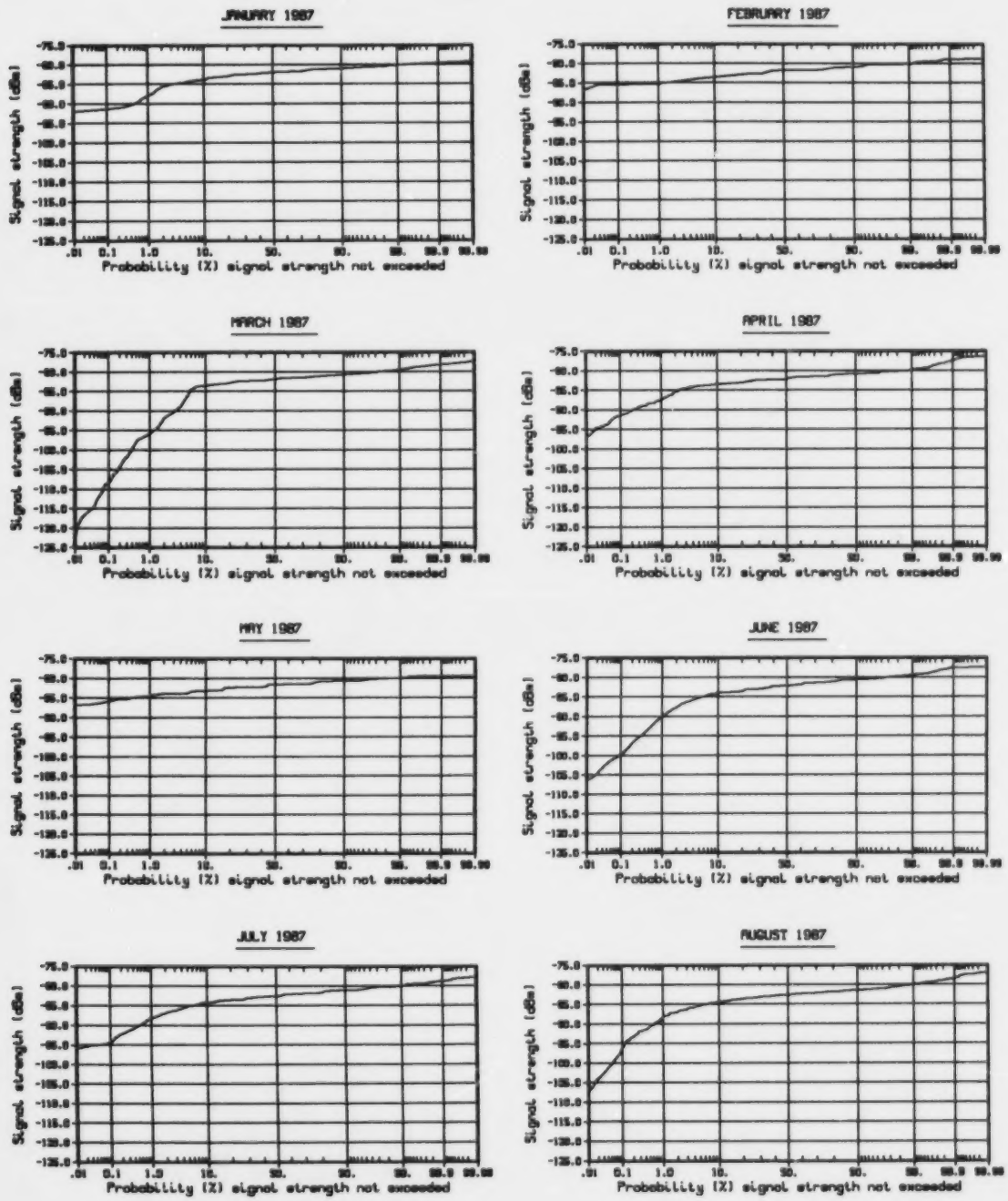

Fig. A3 Monthly cumulative distributions of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 1 of 2)

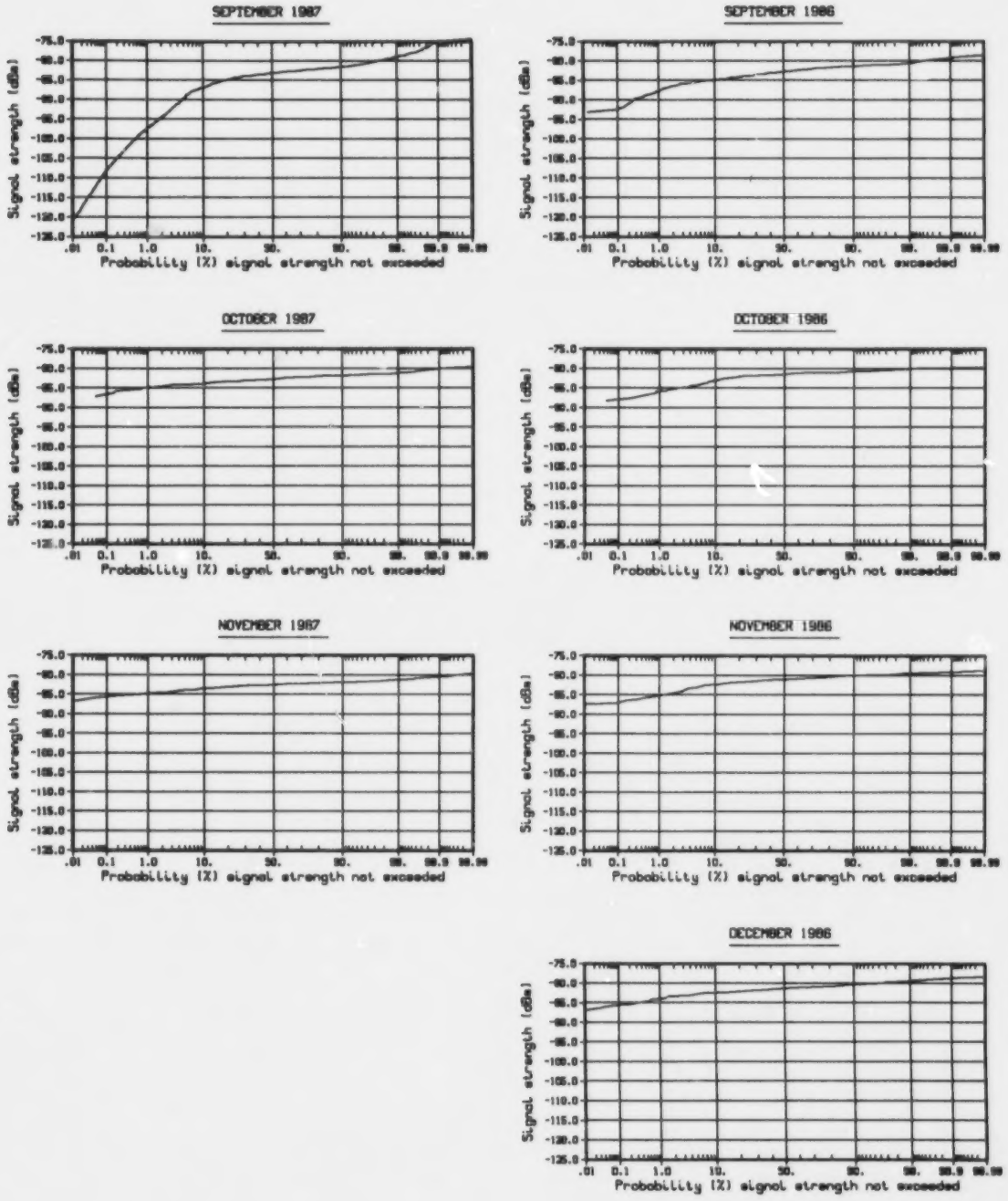

Fig. A3 Monthly cumulative distributions of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 2 of 2)

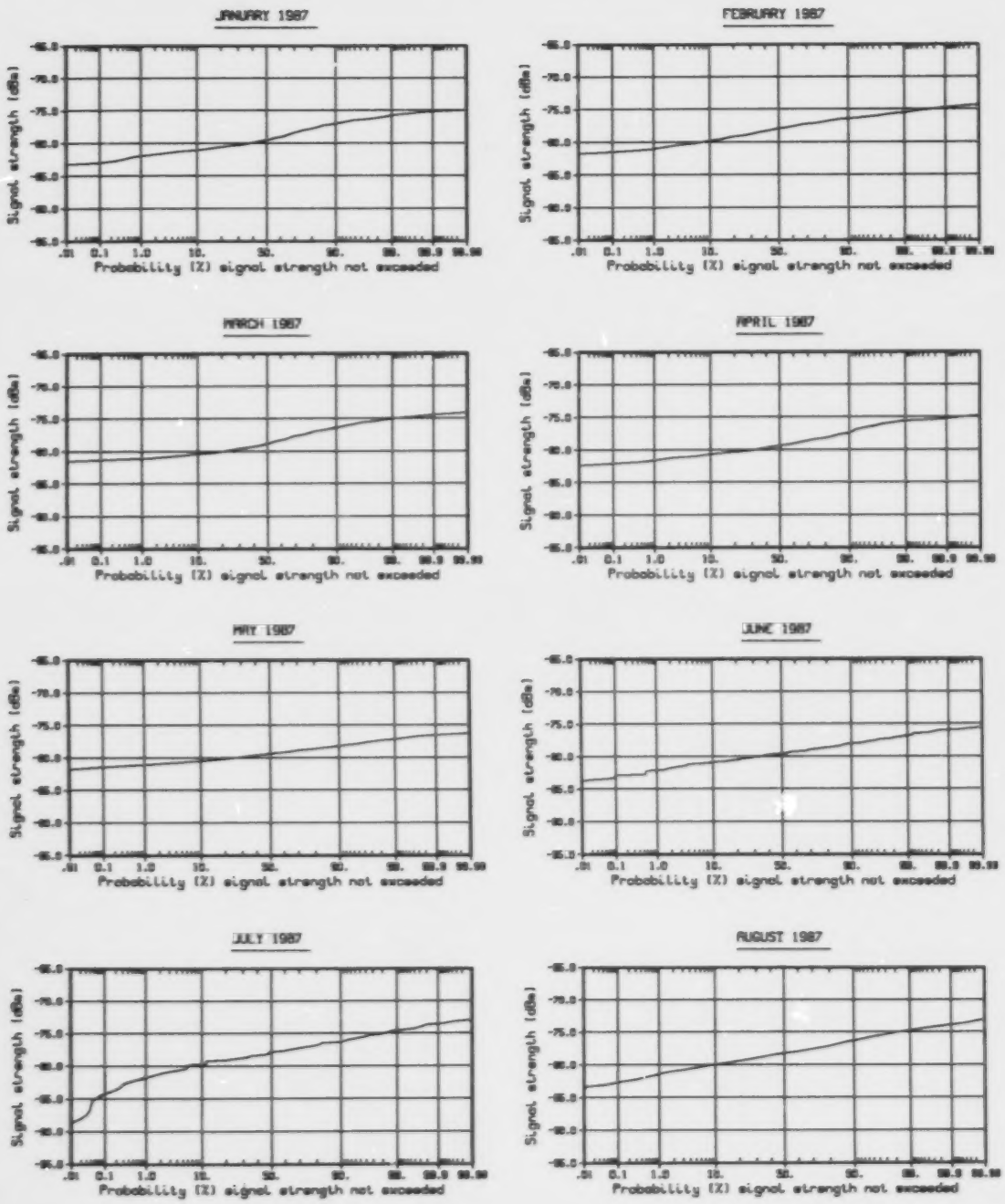

Fig. A4 Monthly cumulative distributions of power received.

CAPE VANDERBILT - IQALUIT (Page 1 of 2)

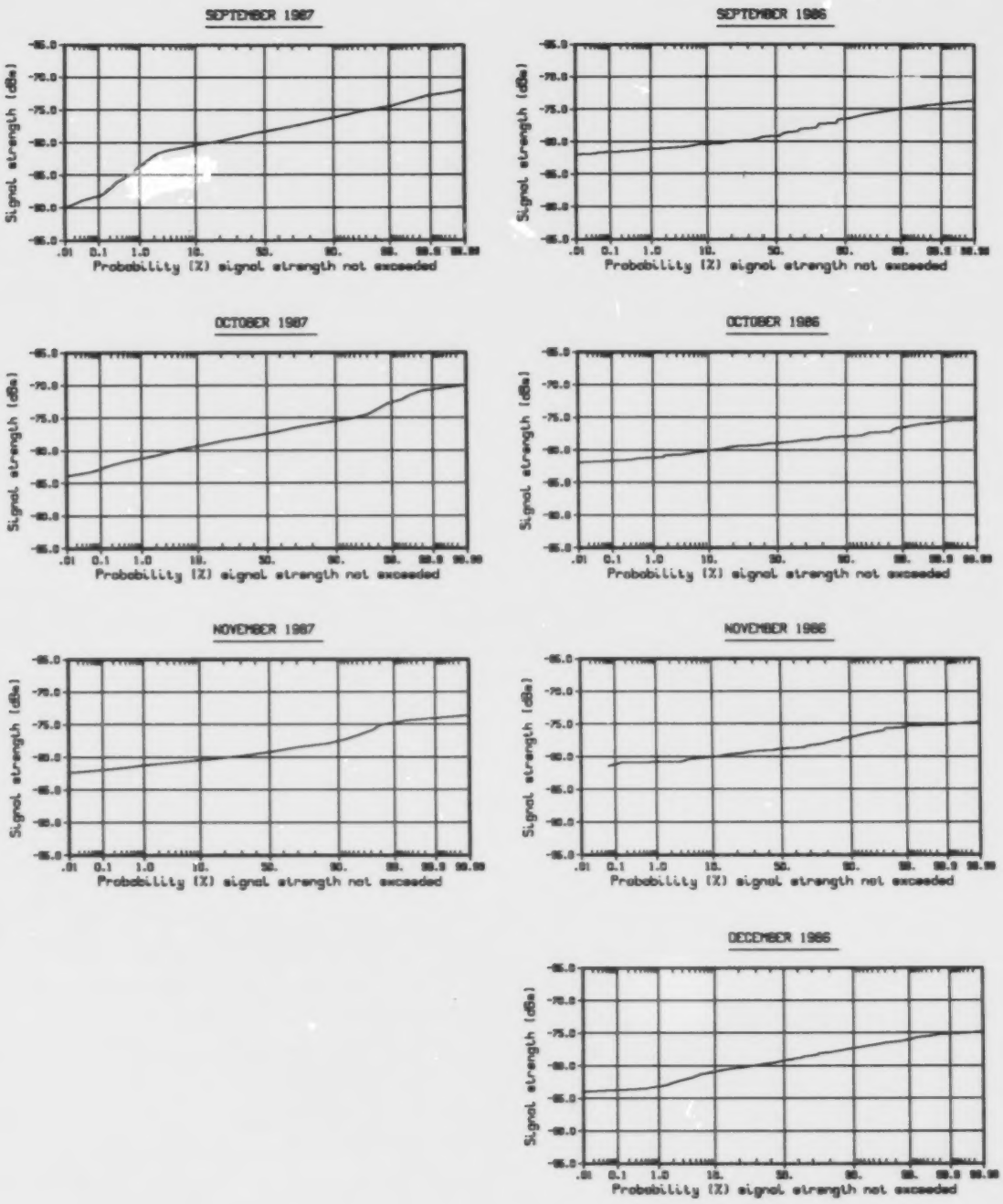

Fig. A4 Monthly cumulative distributions of power received.

CAPE VANDERBILT - IQALUIT (Page 2 of 2)

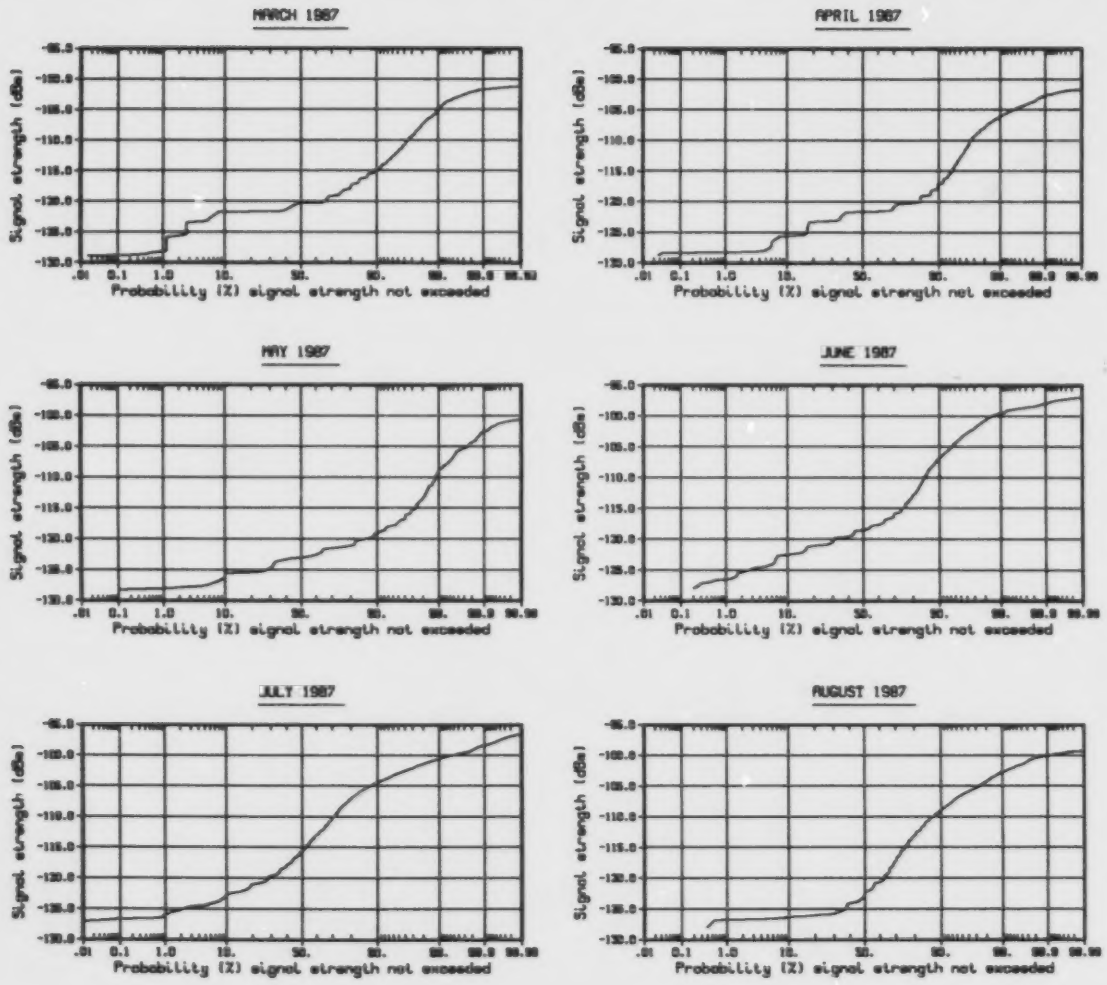

Fig. A5 Monthly cumulative distributions of power received.

CAPE KAKKIVIAK - CAPE WARWICK (Page 1 of 2)

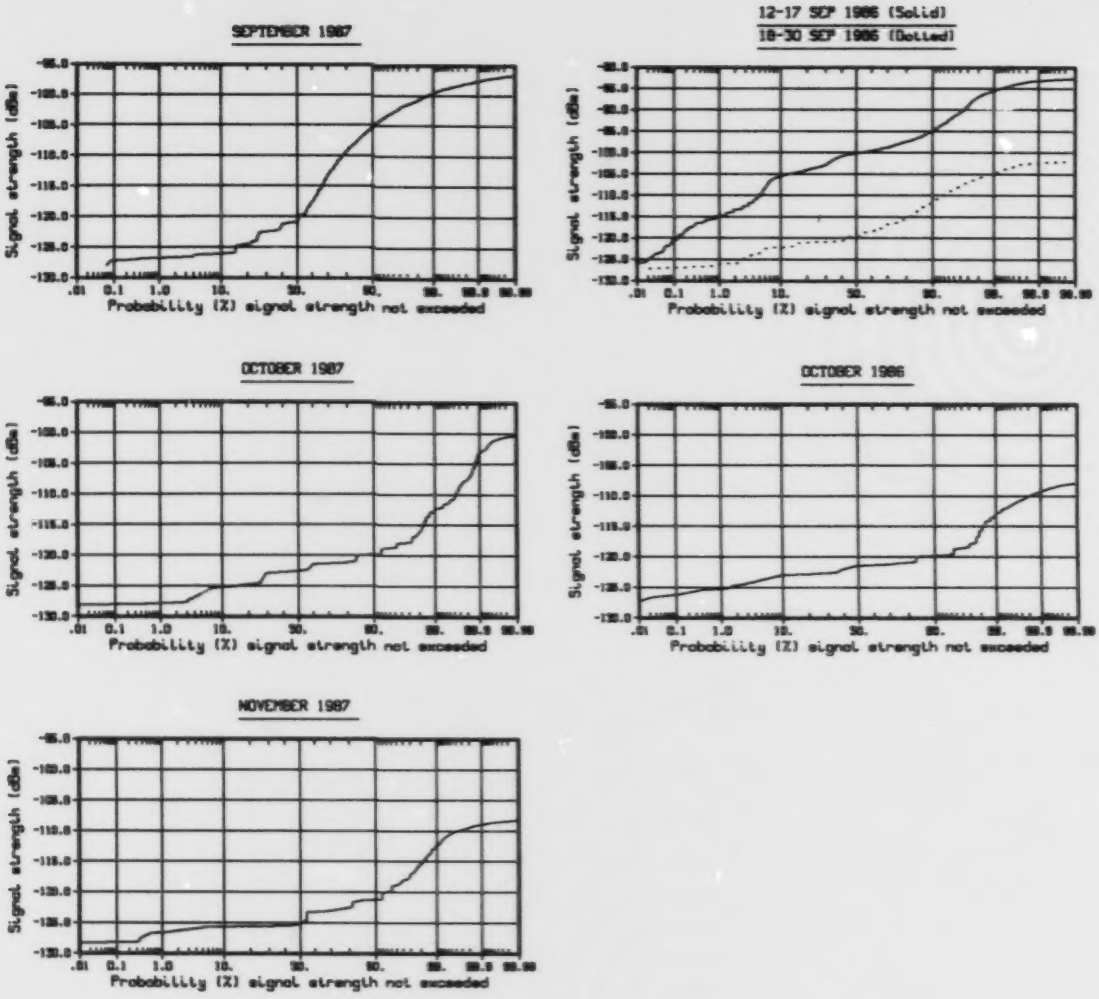

Fig. A5 Monthly cumulative distributions of power received.

CAPE KAKKIVIAK - CAPE WARWICK (Page 2 of 2)

ANNEX "B"

HOURLY MEDIAN VALUES OF POWER RECEIVED

This annex is a graphical presentation of the hourly median values of power received over each experimental path. The plots cover on a monthly basis the period September 1986 to November 1987.

The hourly median values are presented in the following order:

Fig.	PATH		
B1	Lacy Island	to	Cape Warwick
B2	Cape Warwick	to	Cape Cracroft
B3	Cape Cracroft	to	Cape Vanderbilt
B4	Cape Vanderbilt	to	Iqaluit
B5	Cape Kakkiviak	to	Cape Warwick

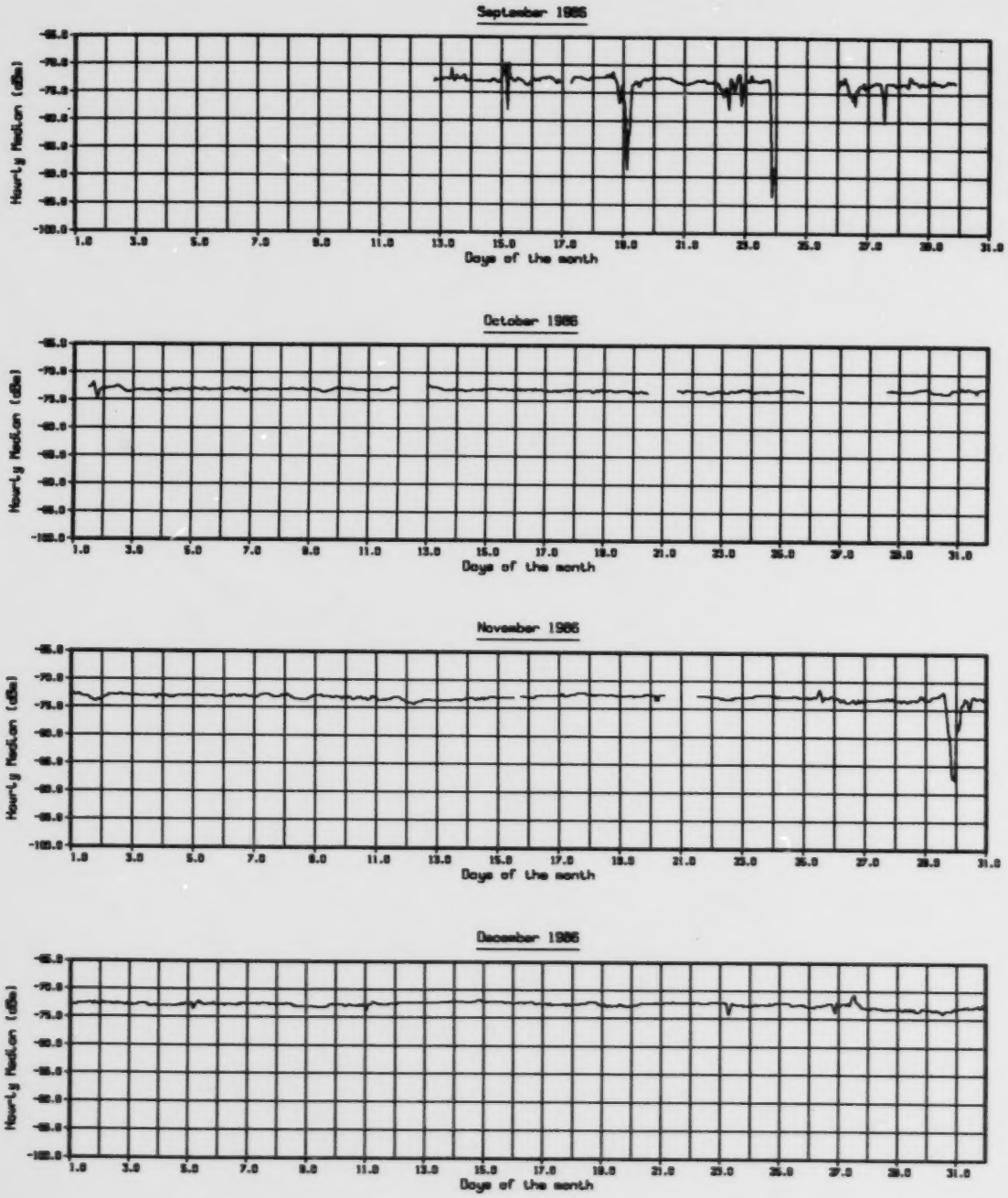

Fig. B1 Hourly median values of power received.

LACY ISLAND - CAPE WARWICK (Page 1 of 4)

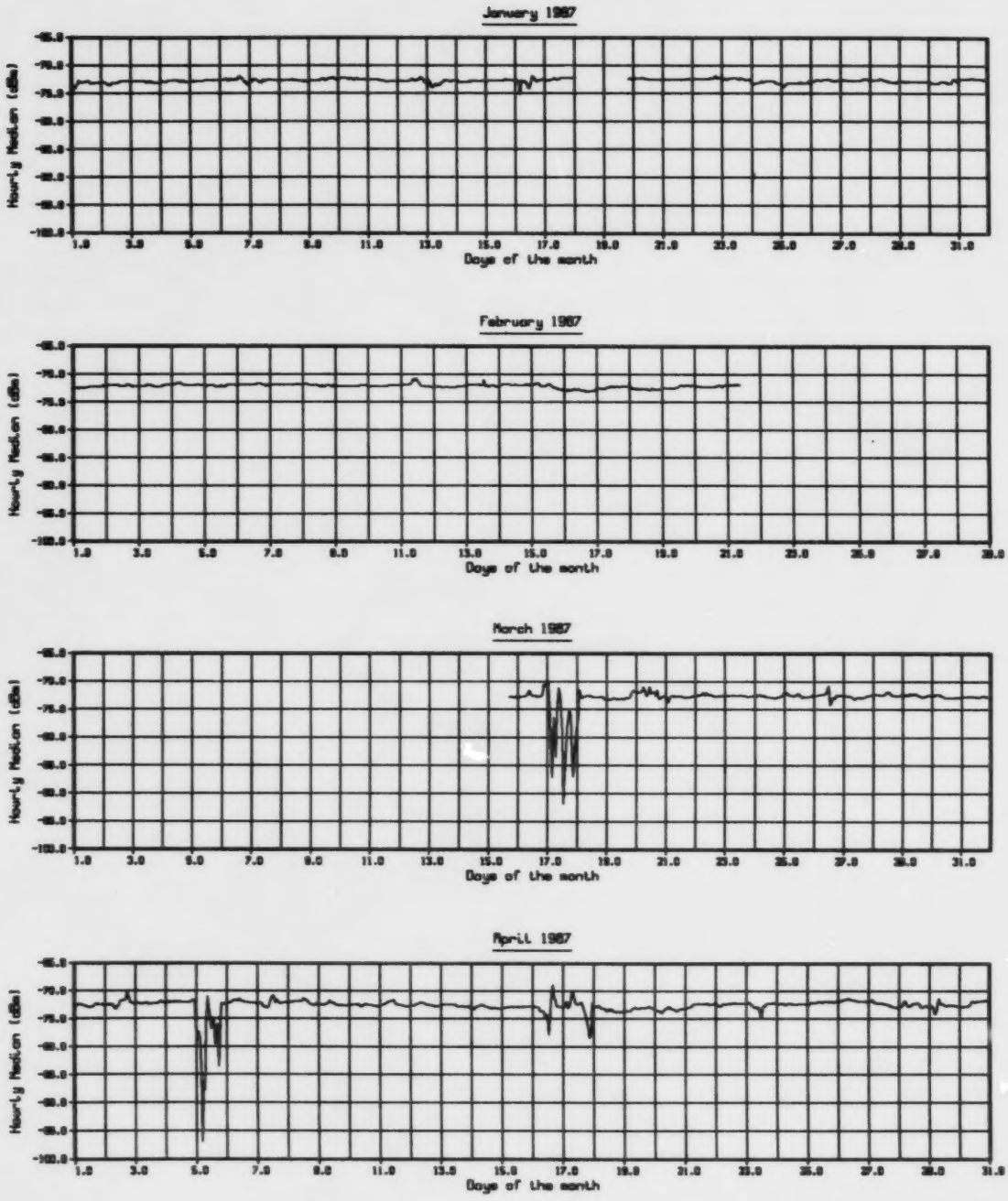

Fig. B1 Hourly median values of power received.

LACY ISLAND - CAPE WARWICK (Page 2 of 4)

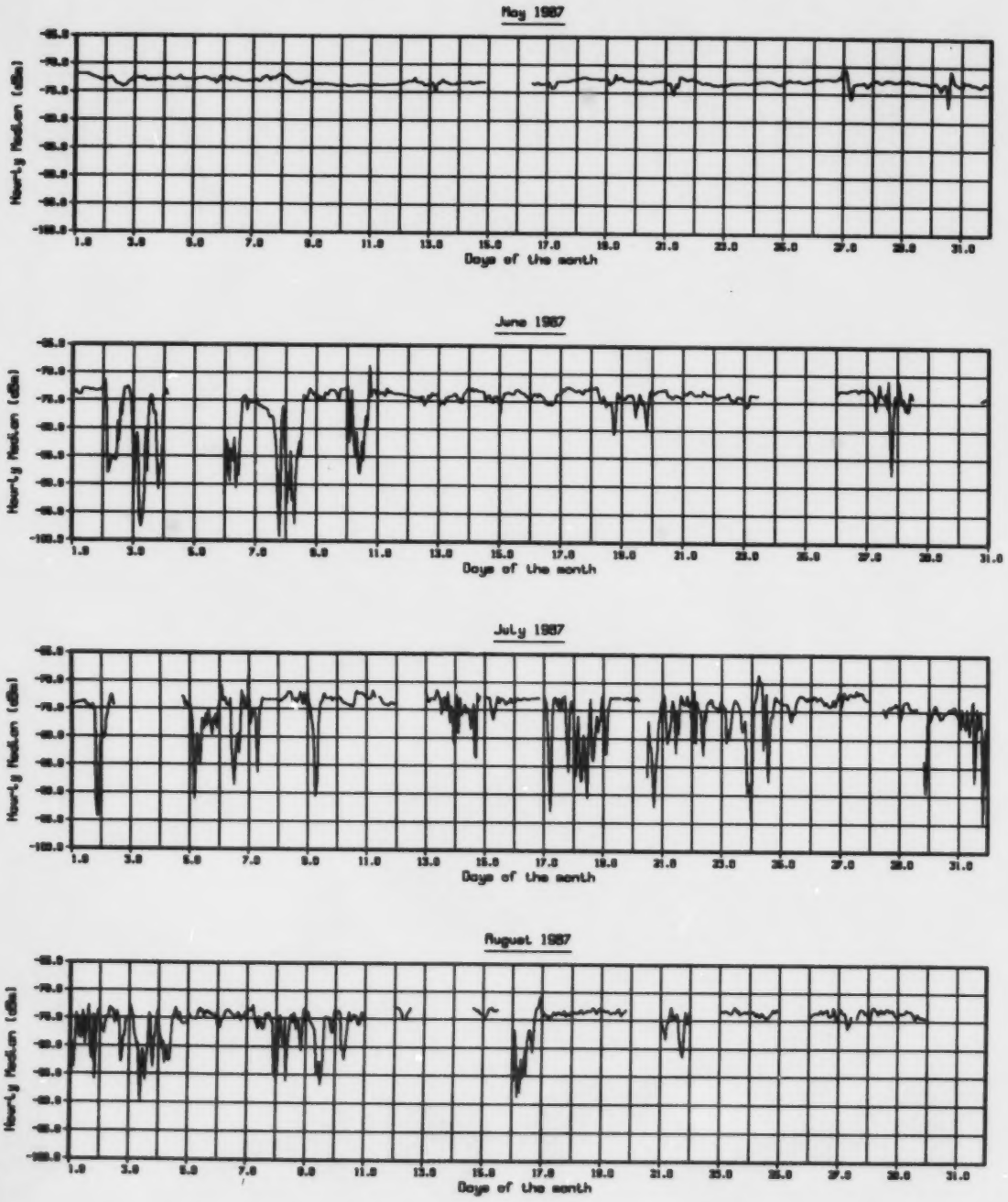

Fig. 81 Hourly median values of power received.

LACY ISLAND - CAPE WARWICK (Page 3 of 4)

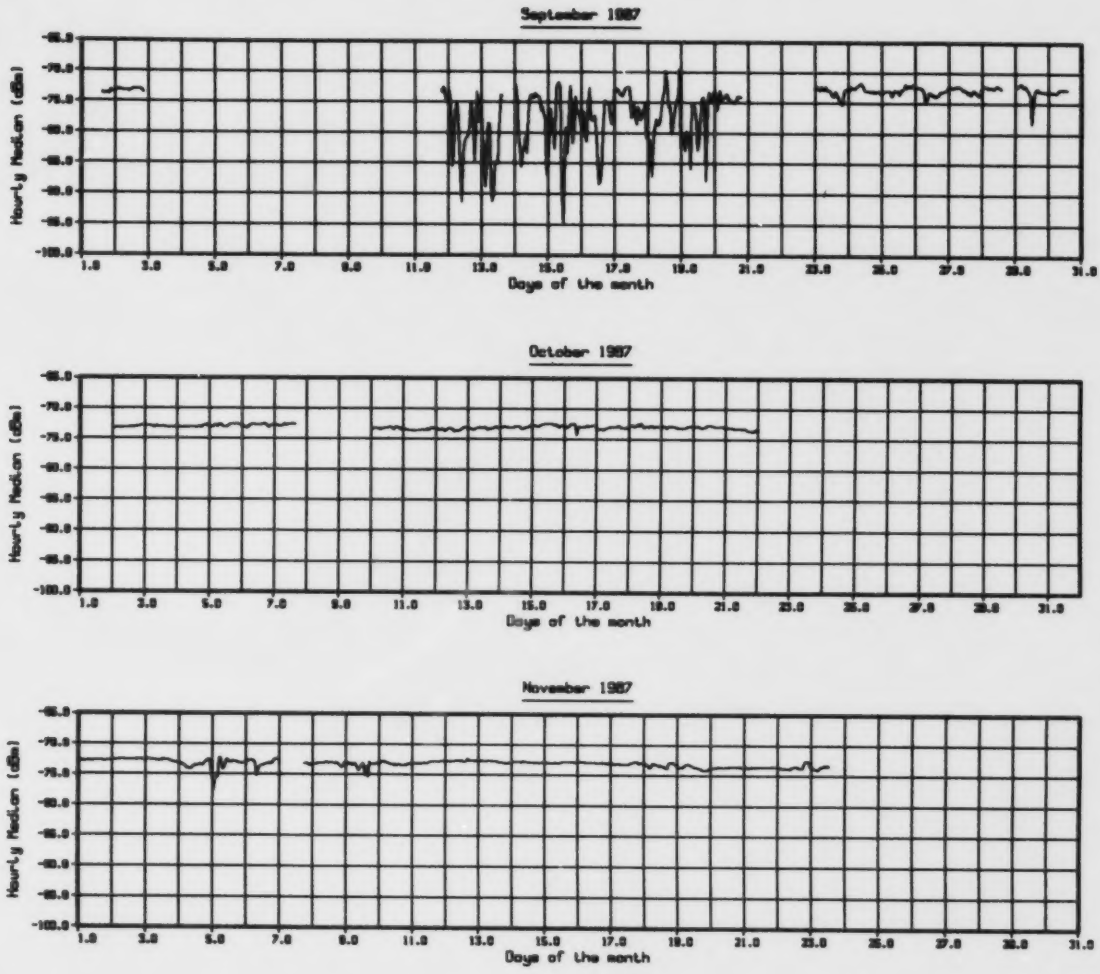

Fig. B1 Hourly median values of power received.

LACY ISLAND - CAPE WARWICK (Page 4 of 4)

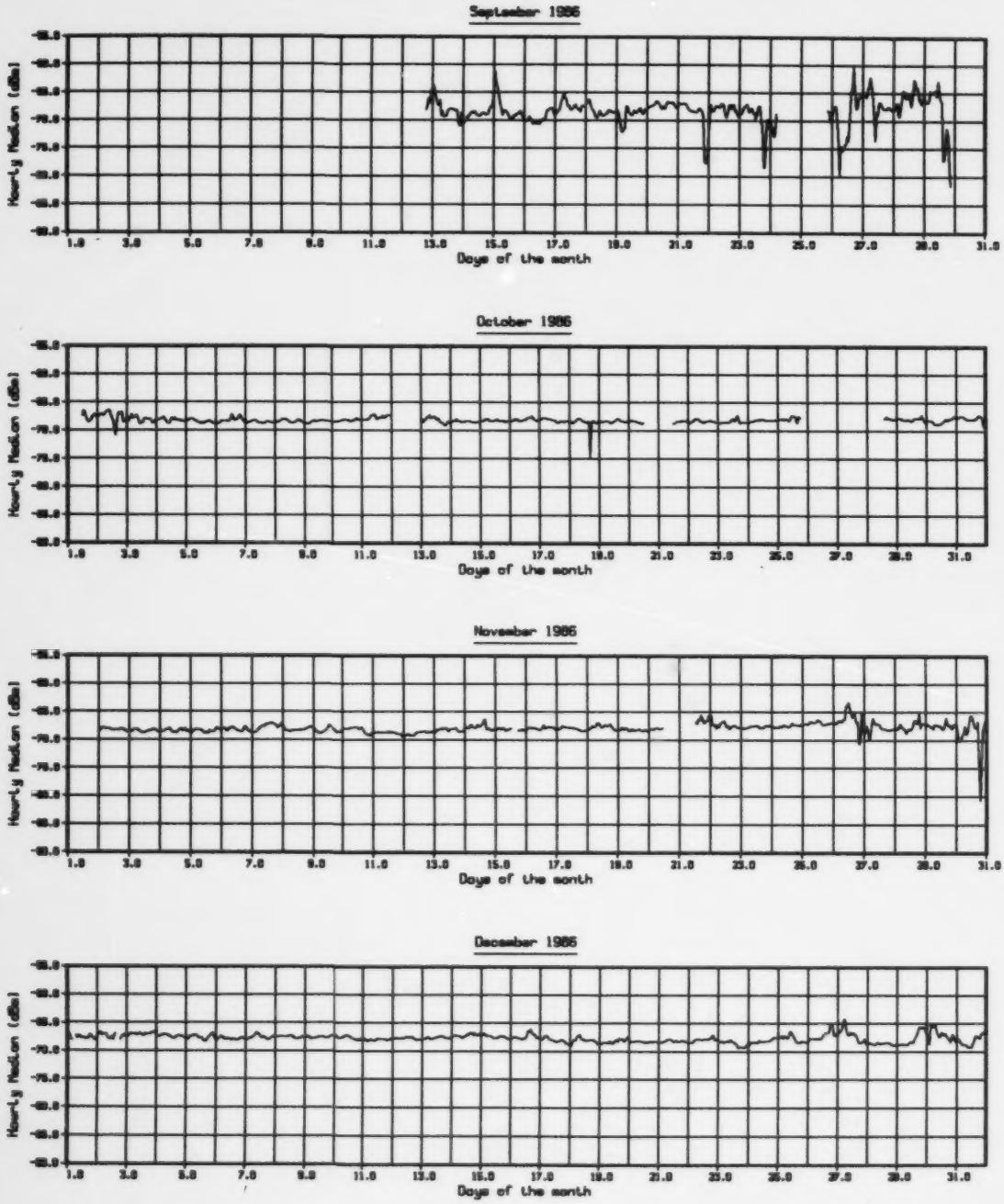

Fig. B2 Hourly median values of power received.

CAPE WARWICK - CAPE CRACROFT (Page 1 of 4)

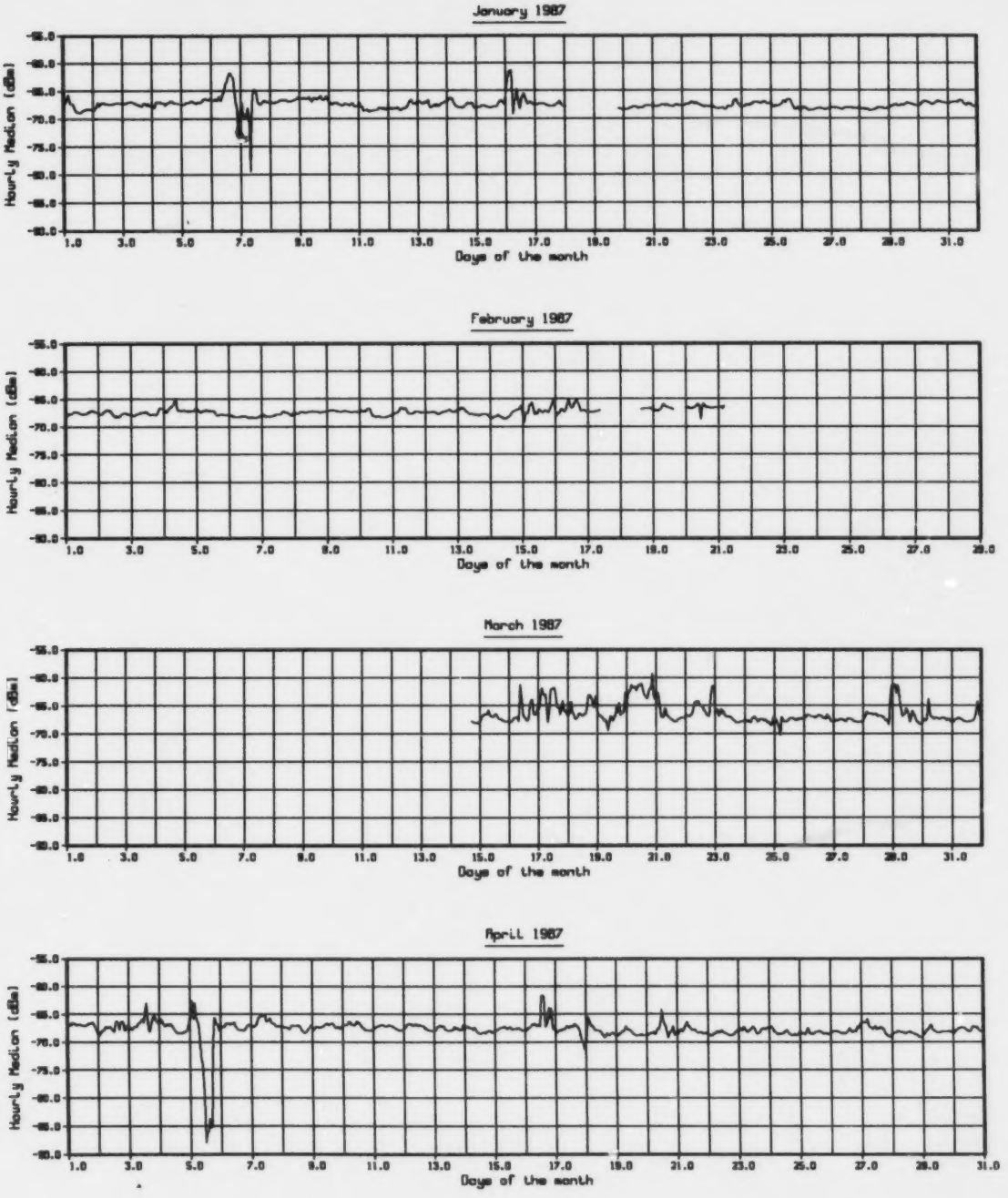

Fig. B2 Hourly median values of power received.

CAPE WARWICK - CAPE CRACROFT (Page 2 of 4)

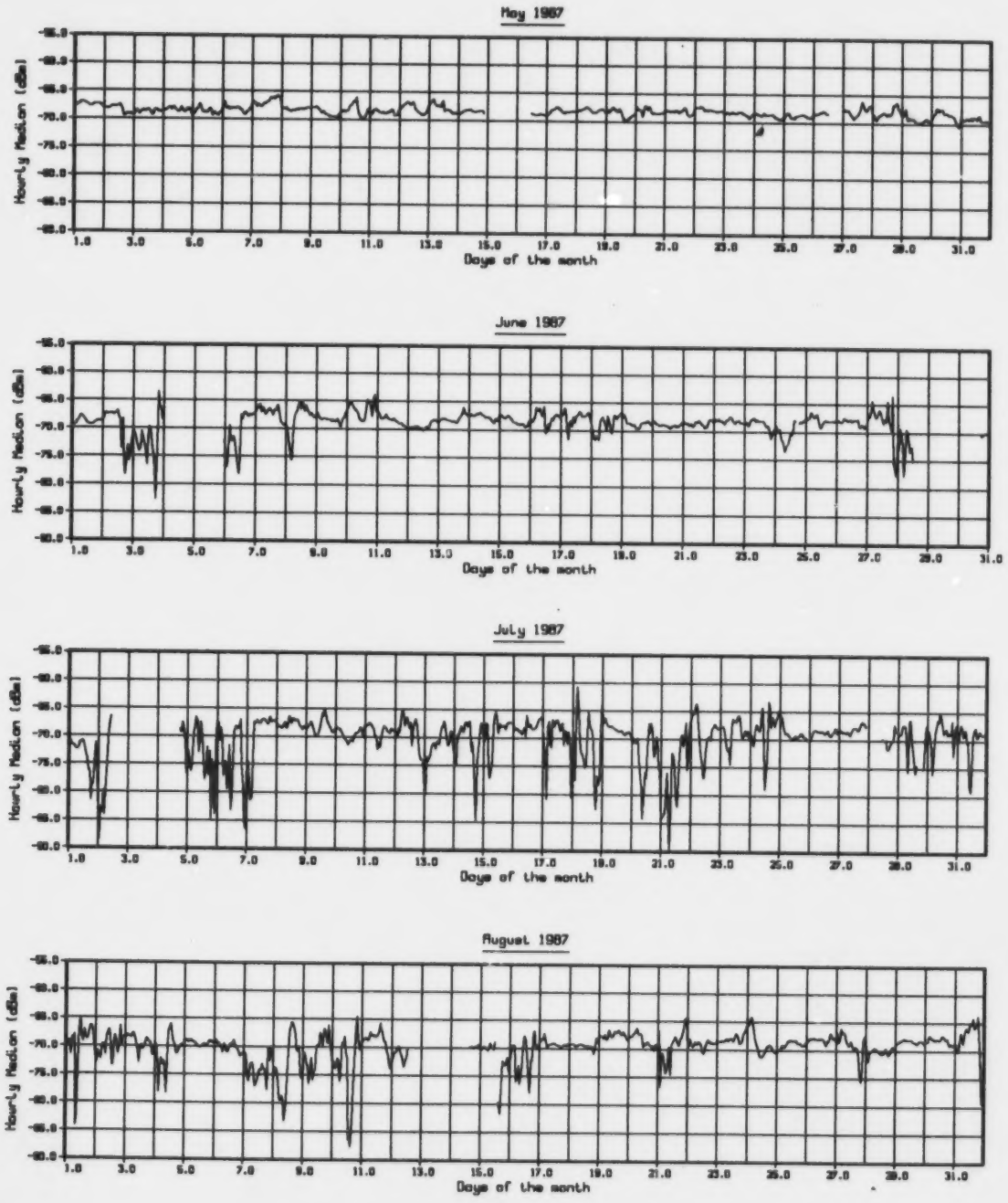

Fig. B2 Hourly median values of power received.

CAPE WARWICK - CAPE CRACROFT (Page 3 of 4)

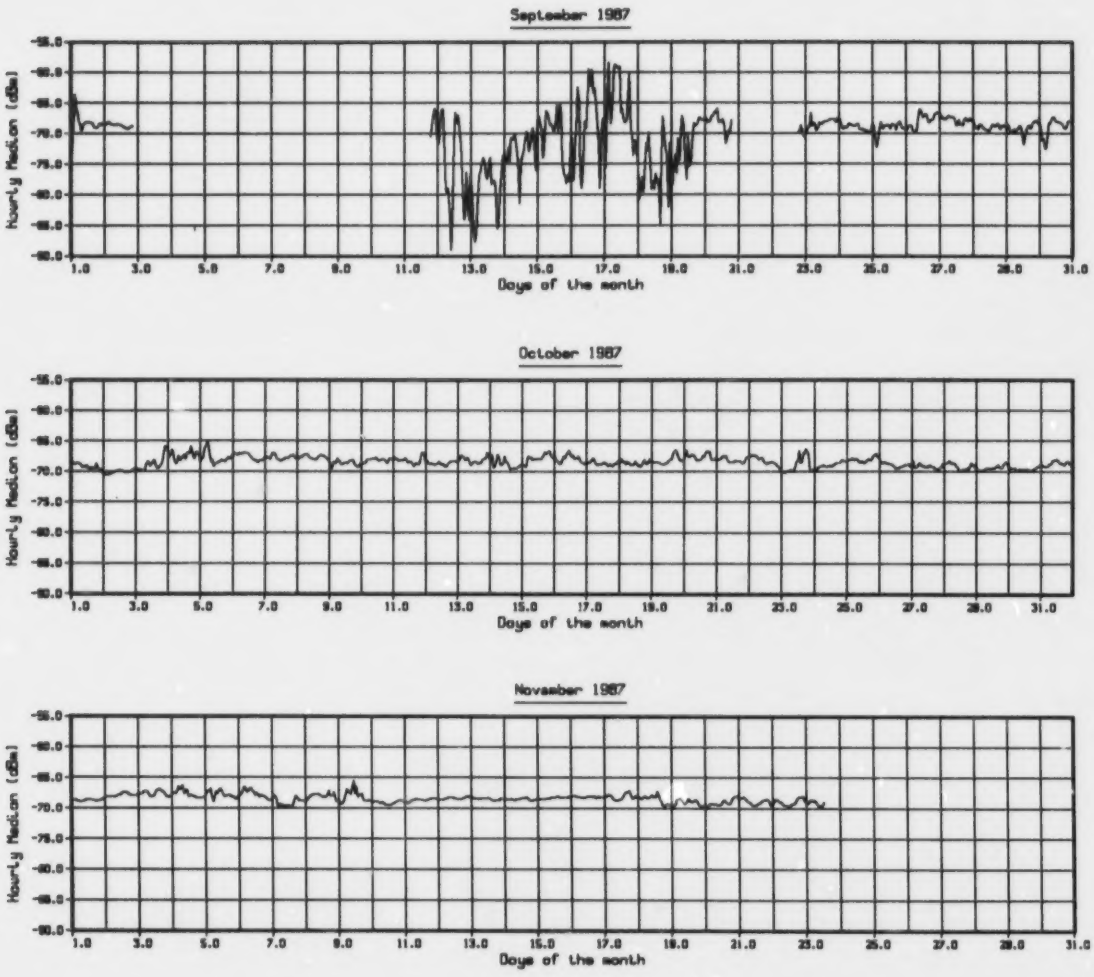

Fig. B2 Hourly median values of power received.

CAPE WARWICK - CAPE CRACROFT (Page 4 of 4)

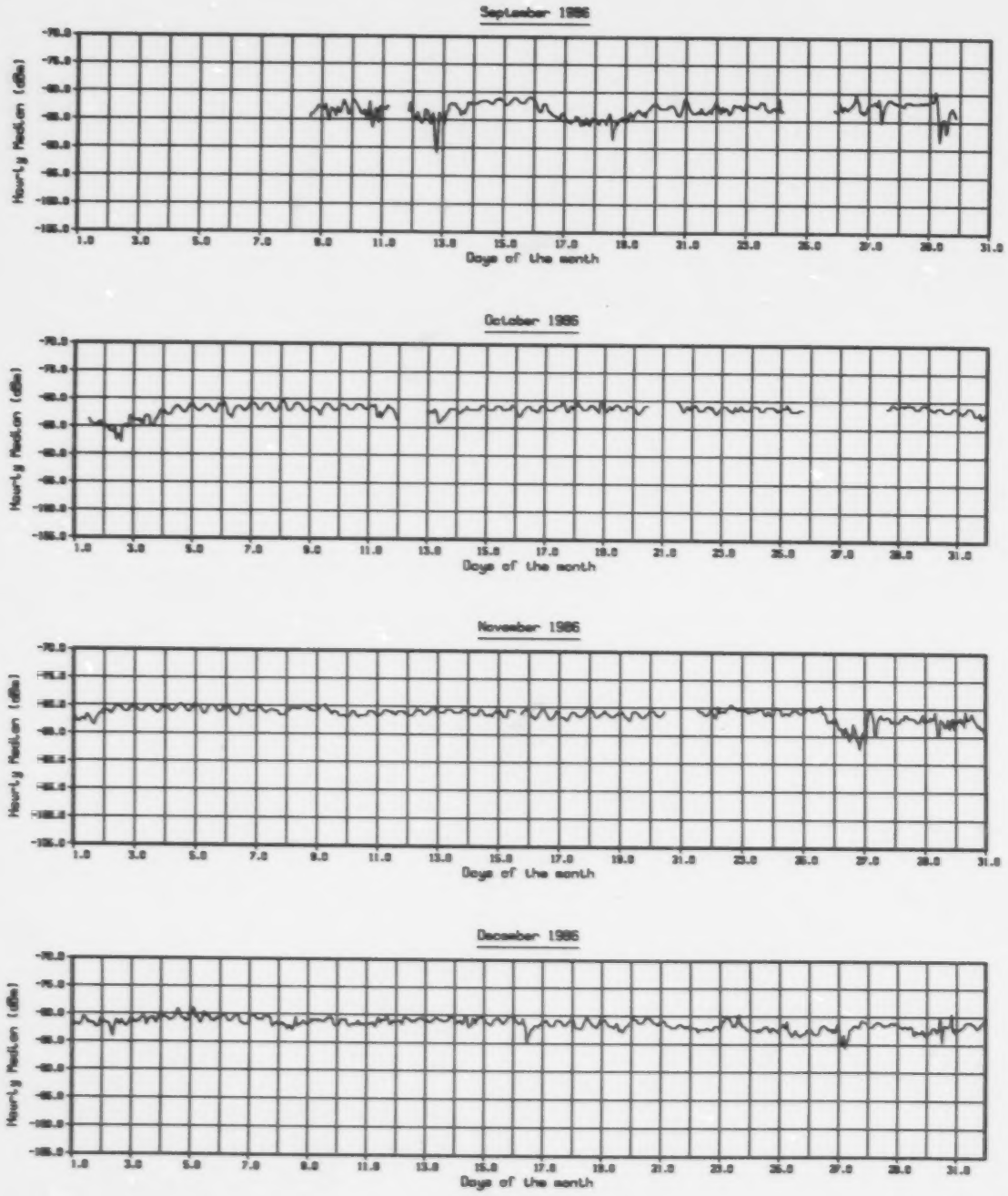

Fig. B3 Hourly median values of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 1 of 4)

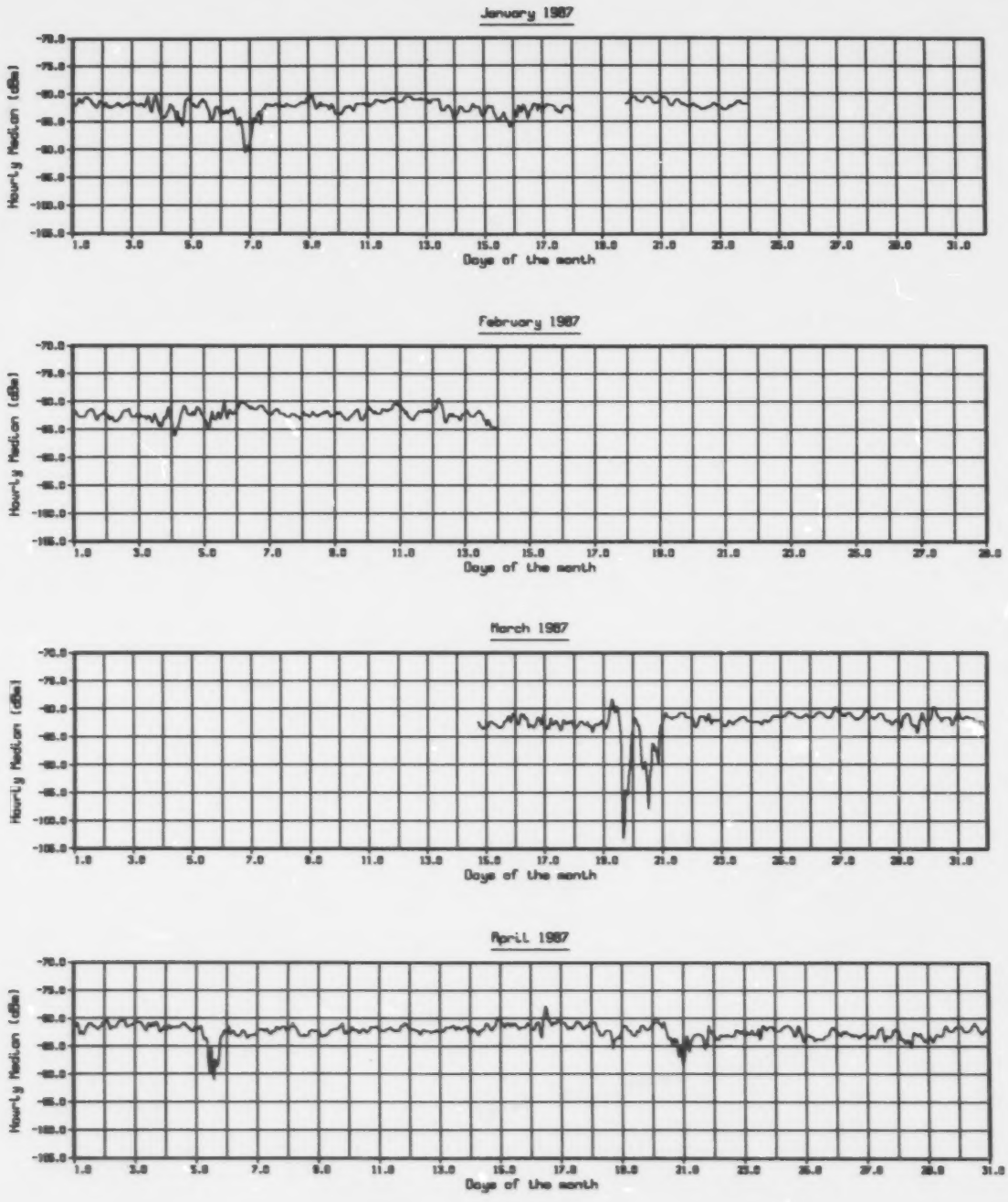

Fig. B3 Hourly median values of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 2 of 4)

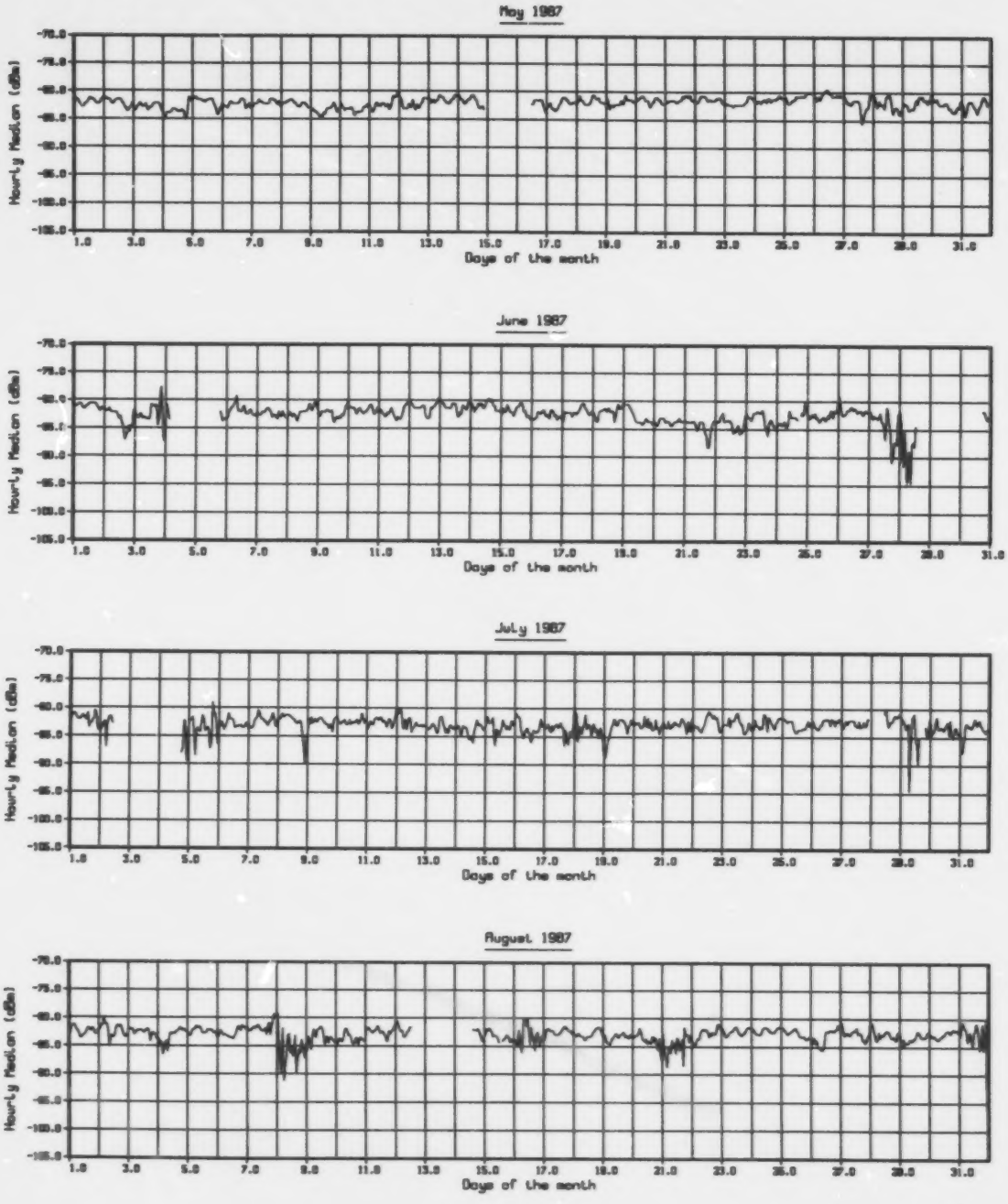

Fig. 83 Hourly median values of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 3 of 4)

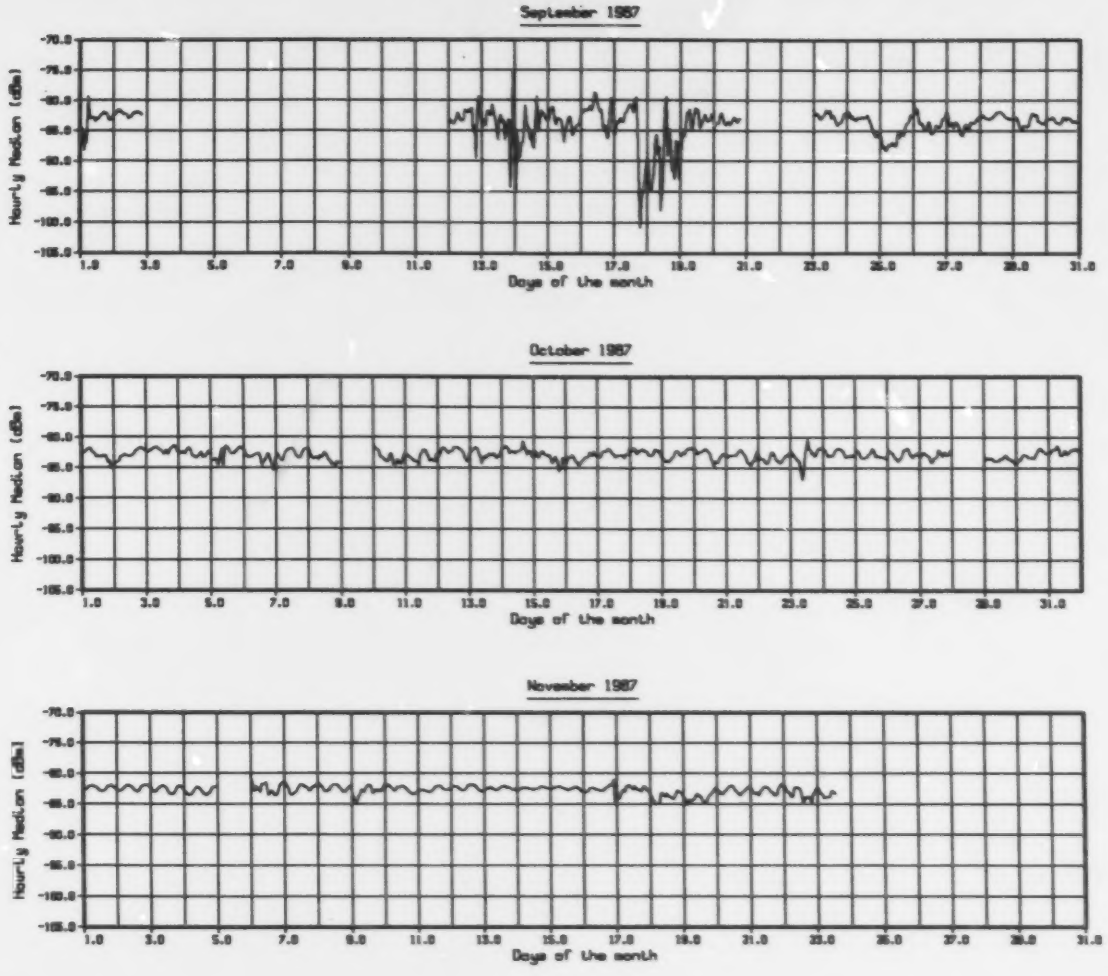

Fig. B3 Hourly median values of power received.

CAPE CRACROFT - CAPE VANDERBILT (Page 4 of 4)

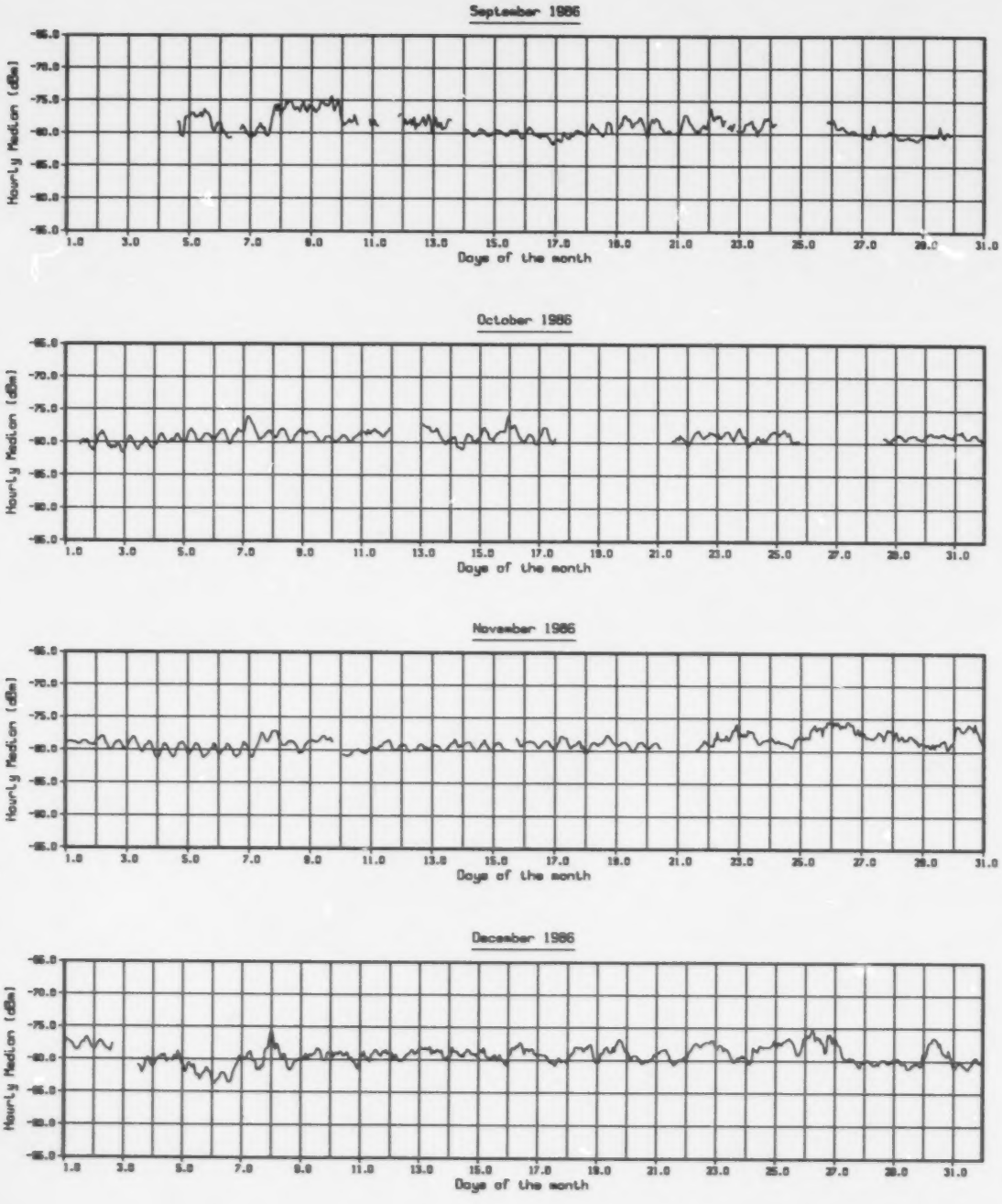

Fig. 84 Hourly median values of power received.

CAPE VANDERBILT - IQALUIT (Page 1 of 4)

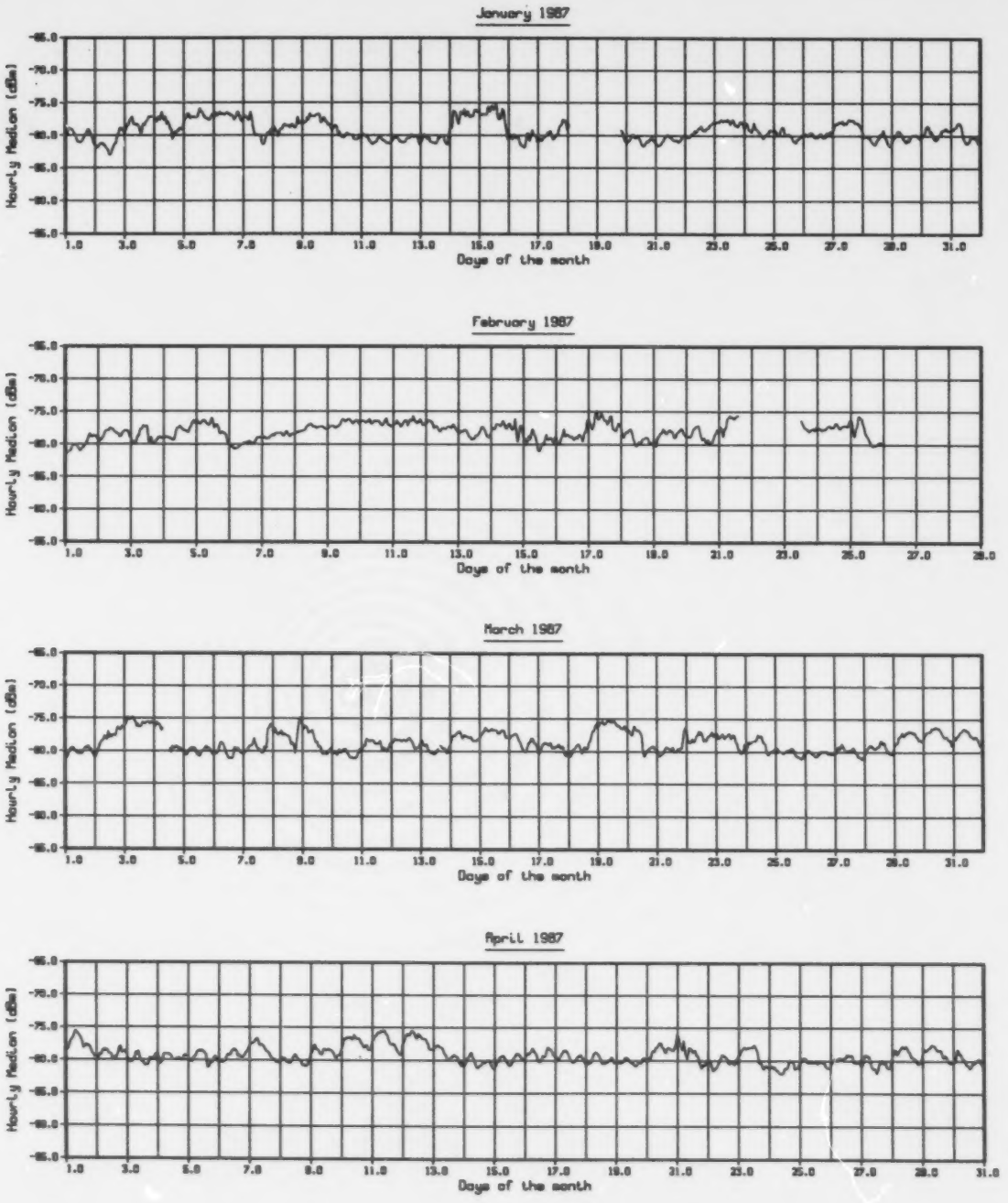

Fig. B4 Hourly median values of power received.

CAPE VANDERBILT - IQALUIT (Page 2 of 4)

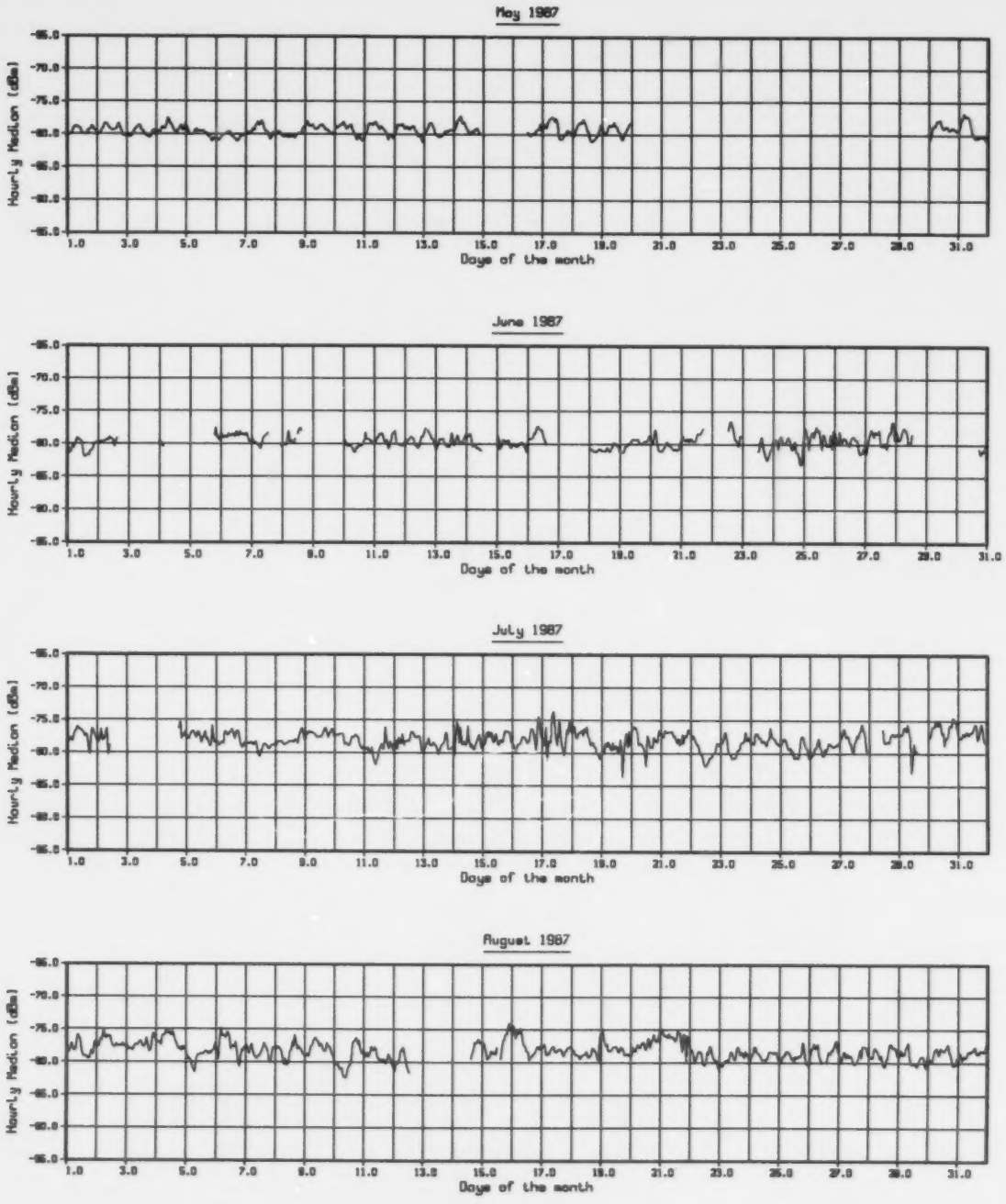

Fig. B4 Hourly median values of power received.

CAPE VANDERBILT - IQALUIT (Page 3 of 4)

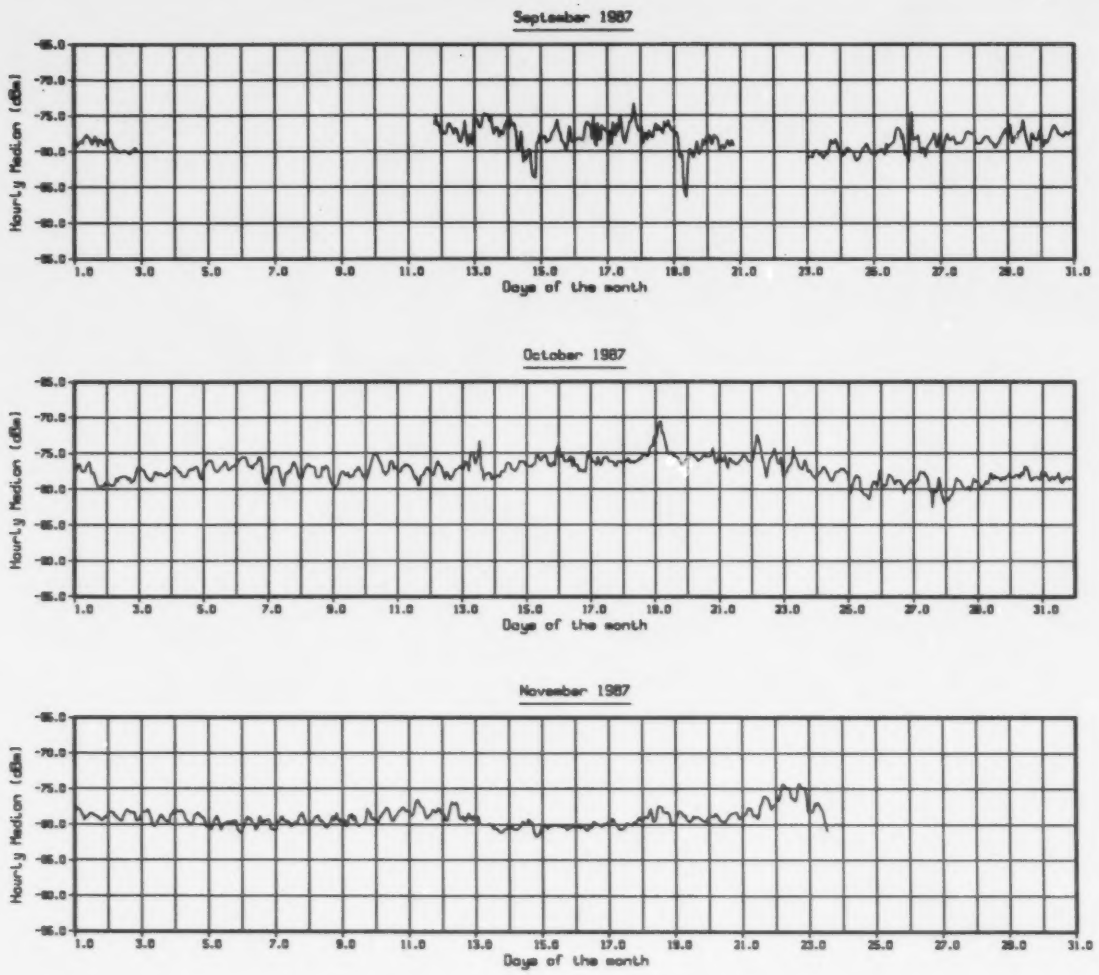

Fig. B4 Hourly median values of power received.

CAPE VANDERBILT - IQALUIT (Page 4 of 4)

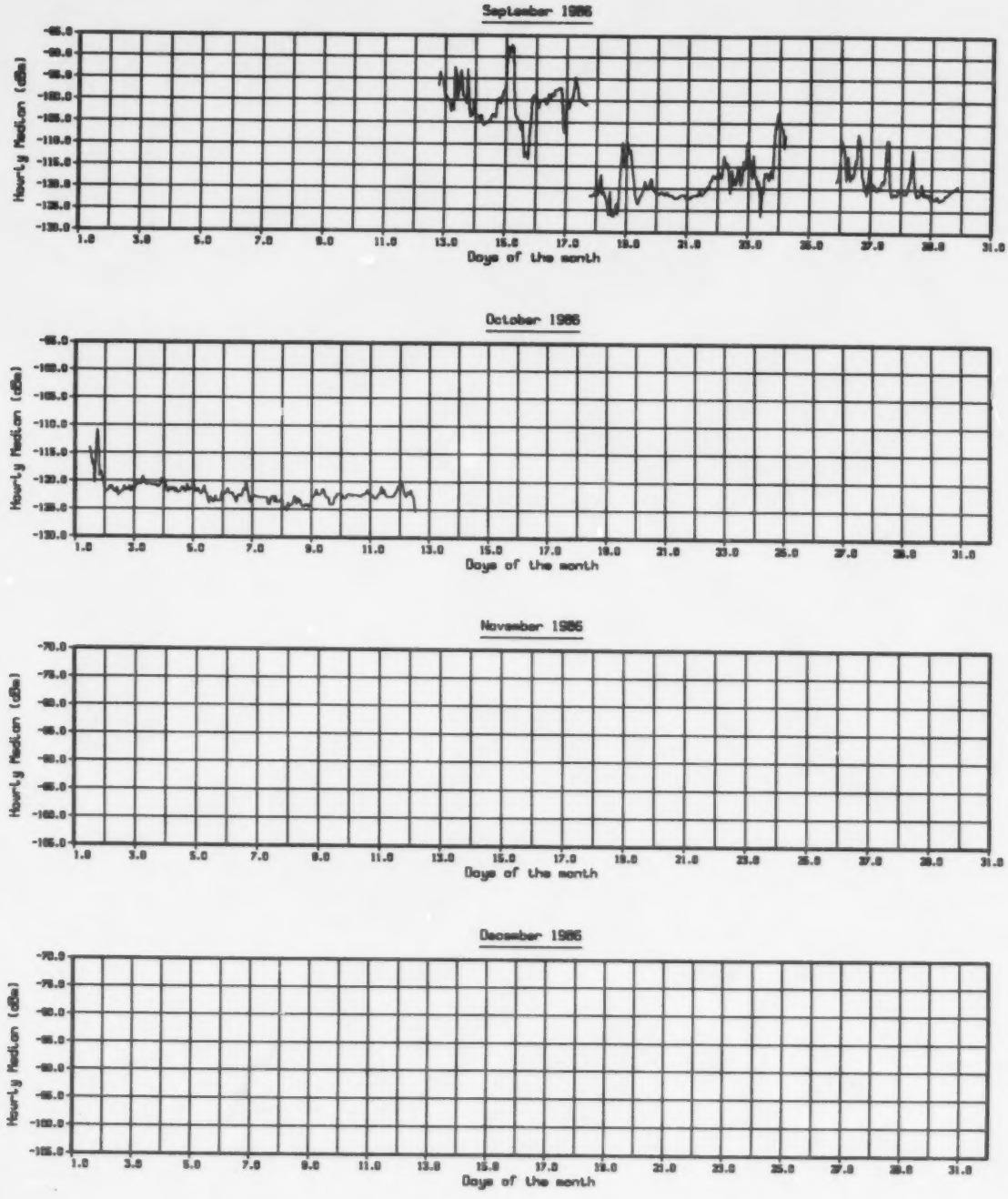

Fig. B5 Hourly median values of power received.

CAPE KAKKIVIAK - CAPE WARWICK (Page 1 of 4)

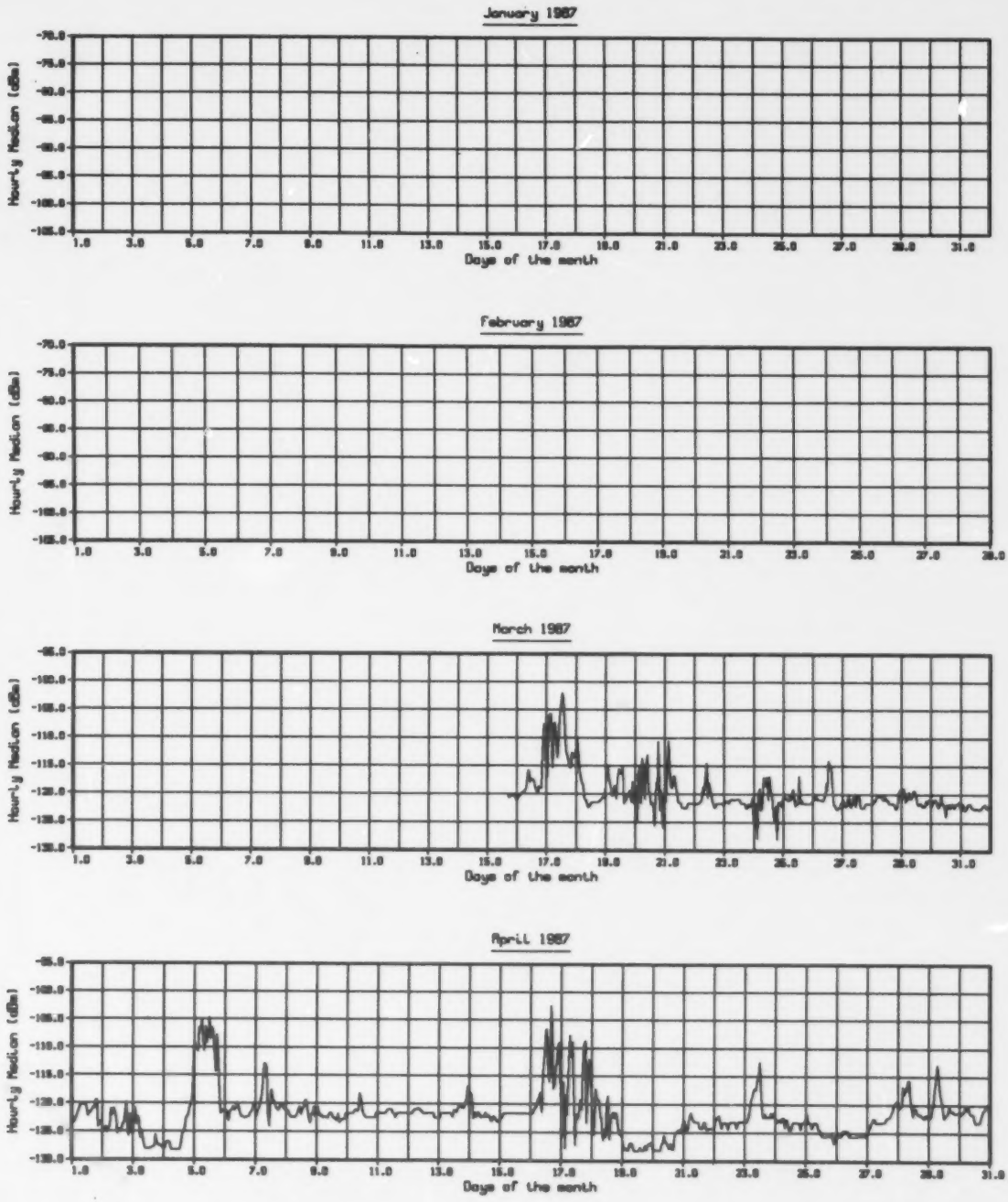

Fig. 85 Hourly median values of power received.

CAPE KAKKIVIAK - CAPE WARWICK (Page 2 of 4)

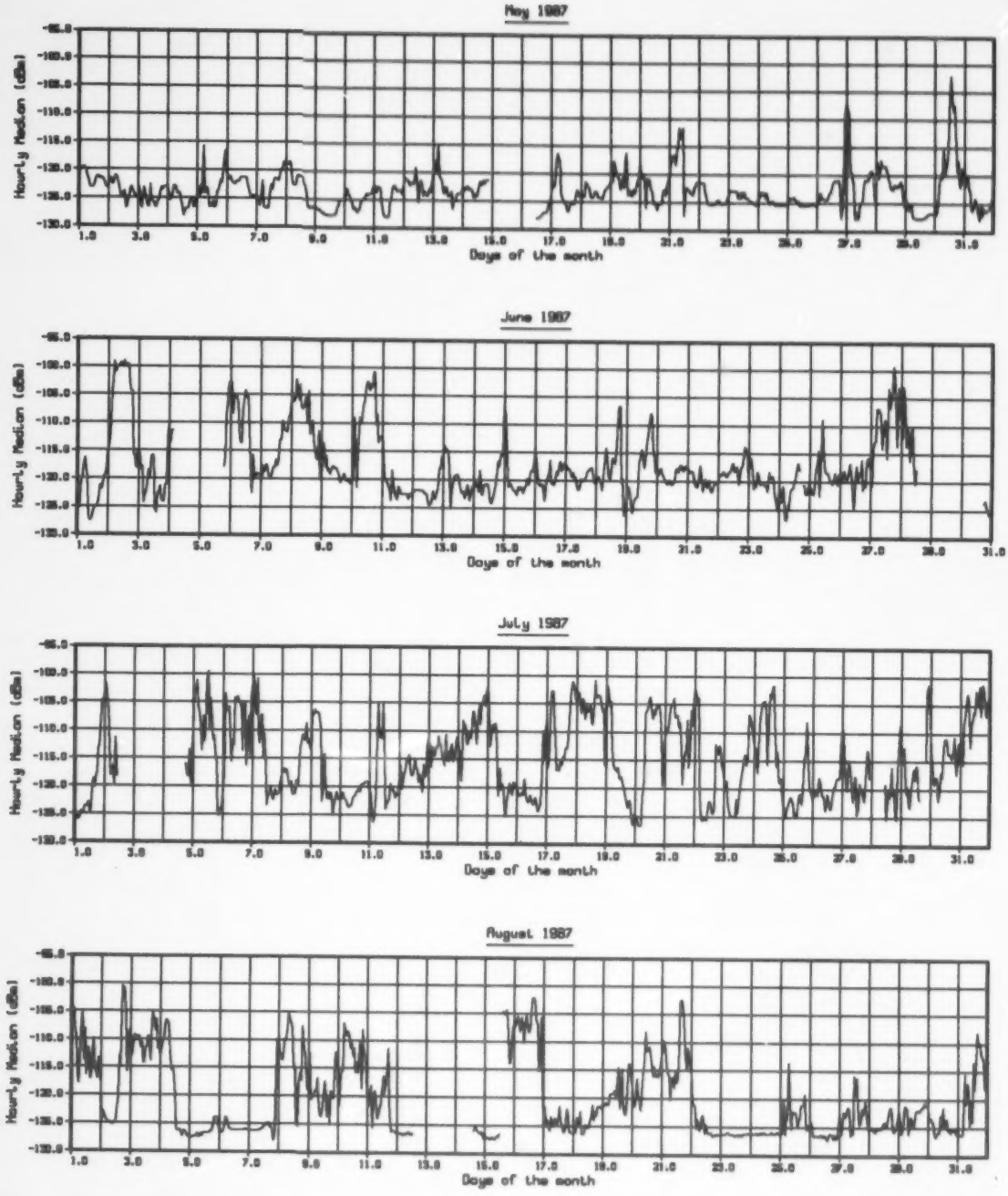

Fig. 85 Hourly median values of power received.

CAPE KAKKIVIAK - CAPE WARWICK (Page 3 of 4)

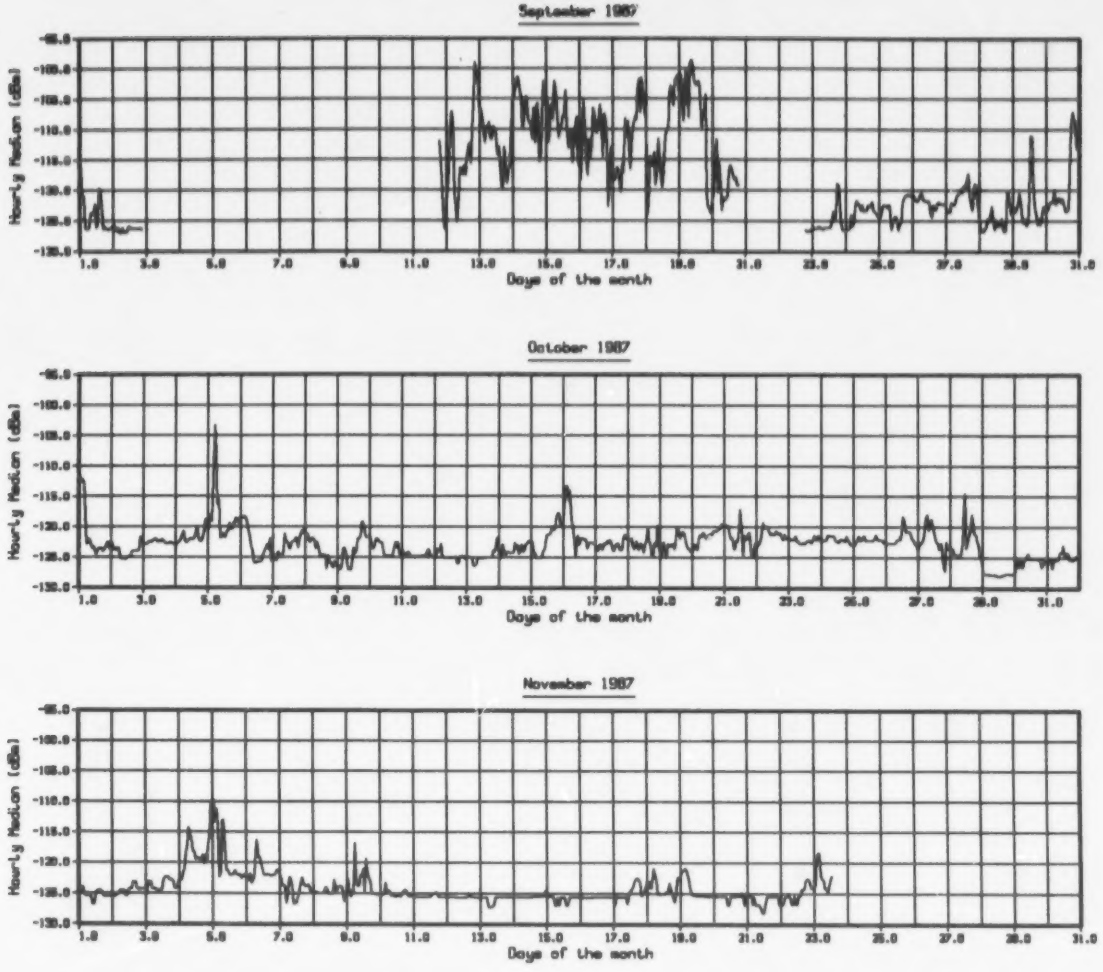

Fig. B5 Hourly median values of power received.
CAPE KAKKIVIAK - CAPE WARWICK (Page 4 of 4)

ANNEX "C"

MONTHLY SUMMARIES OF PROPAGATION STATISTICS

The detailed statistics characterizing 3 of the 5 experimental paths for the period September 1986 to November 1987 are presented in this annex in the following order:

Table	PATH		
C1	Lacy Island	to	Cape Warwick
C2	Cape Warwick	to	Cape Cracroft
C3	Cape Cracroft	to	Cape Vanderbilt

For each month, a daily track record of each path is summarized on a single page, two tables per page:

1- An UPPER table gives on an hourly basis, the offset relative to the absolute monthly median level appearing in the LOWER table, at the junction of the central column and of the last line.

2- A LOWER table gives on a day to day basis, the cumulative distribution of power received at a given receiver. The Minimum and Maximum columns, expressed in dBm, give the extremum absolute levels recorded each day. All other levels, except the monthly median itself, are expressed in dB and represent the offset relative to the absolute monthly median. Adding the monthly median to these latter values will reveal the absolute signal strengths not exceeded at the stated probability level.

The last line of both tables applies to the distribution of the data as a whole, that is, the distribution for the entire month.

Path: LACY ISLAND to CAPE WARWICK - SEPTEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																				-2	4	1	2	1
13	2	5	2	5	5	5	5	3	3	23	7	-1	3	10	6	4	5	4	9	10	-1	-1	2	2
14	-2	0	0	0	0	-1	-1	1	0	-1	-1	-1	0	0	-1	-2	0	4	2	3	-1	-2	-3	2
15	3	11	17	32	16	-51	33	8	5	3	-1	0	2	6	4	2	2	-1	-2	-6	-5	-8	-4	-2
16	0	3	5	0	3	4	0	6	6	6	7	5	7	8	7	8	5	3	3	-3	-4	3	-3	
17								-4	1	6	8	8	7	7	7	8	5	4	4	3	2	2	4	7
18	7	7	7	7	7	7	7	7	7	7	7	11	7	12	11	6	17	6	4	-3	-20	-39	-33	-7
19	-32	-37	-72	-158	-95	-96	-39	-8	-5	-5	0	0	-7	-9	0	1	3	4	6	1	4	4	7	7
20	6	5	6	6	5	5	6	7	7	6	6	6	6	6	4	2	1	1	-1	-2	-3	-2	-3	-5
21	-5	-5	-5	-5	-4	-3	-3	-3	-1	-1	1	2	1	1	0	3	2	-1	-3	-2	-2	-3	-1	-3
22	-2	-3	-3	-5	-14	-13	-14	-28	-17	-10	-20	-50	0	6	-4	-16	-13	-3	9	13	10	-43	-7	-7
23	-1	3	2	-1	0	11	0	2	2	1	0	-1	1	-1	4	0	3	3	5	-3	-74	-206	-154	-181
24																								
25																								
26	-6	-9	1	3	-4	2	9	-1	-4	-18	-25	-20	-33	-21	-42	-14	-16	-7	-6	-6	-9	-1	-13	-11
27	-8	-6	-6	-4	-3	-3	-1	0	-2	-3	-1	-17	-23	-73	-6	-2	-2	-2	-3	-3	-2	-3	-7	-6
28	-4	-5	-4	-3	-3	-4	-3	-6	-9	10	8	4	0	1	1	-2	-5	-6	-2	-1	-4	-5	-4	-3
29	-2	-2	-3	0	4	-3	-2	-1	-2	-2	-5	-4	-3	-3	-1	3	1	-1	2	1	1	-2		
30																								
	-3	-1	0	-1	-2	-1	0	0	0	1	1	0	1	2	2	2	2	1	2	-1	-3	-2	-3	-2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBw or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12	-735	-6	-6	-6	-6	-5	-4	-3	-1	0	0	1	2	2	4	5	7	8	8	9	9	9	-720	12
13	-743	-14	-13	-7	-6	-4	-3	-1	1	3	4	5	5	6	8	12	20	26	32	37	37	38	-691	13
14	-741	-12	-11	-9	-7	-5	-3	-2	-1	-1	-1	0	0	1	1	3	4	5	6	7	7	9	-720	14
15	-847	-118	-118	-112	-104	-83	-10	-7	-3	-1	1	2	3	5	7	24	33	38	43	52	53	54	-674	15
16	-741	-12	-12	-11	-9	-6	-4	-3	0	1	3	4	5	6	7	8	9	9	9	10	10	12	-711	16
17	-737	-8	-8	-8	-7	-5	-3	1	2	3	4	5	6	7	7	8	8	9	9	9	9	9	-719	17
18	-803	-74	-73	-68	-57	-50	-36	-20	0	6	6	6	7	7	9	13	15	16	17	17	17	17	-712	18
19	-903	-174	-174	-173	-169	-159	-122	-93	-40	-10	-7	-2	0	3	4	7	7	8	8	9	9	9	-720	19
20	-738	-7	-7	-7	-6	-5	-4	-3	-1	1	4	5	6	6	6	7	7	7	7	8	8	8	-721	20
21	-736	-7	-7	-7	-7	-6	-6	-5	-4	-3	-3	-2	-1	0	1	2	3	3	4	6	6	6	-723	21
22	-800	-71	-71	-68	-64	-55	-43	-32	-20	-14	-12	-9	-4	-3	0	7	13	16	18	21	22	23	-706	22
23	-1027	-287	-266	-242	-225	-208	-189	-158	-7	-2	0	1	1	2	4	5	7	12	14	19	20	20	-709	23
24																								24
25																								25
26	-730	-61	-61	-59	-56	-42	-34	-26	-19	-14	-10	-7	-5	-3	-1	2	5	9	12	13	14	14	-715	26
27	-863	-134	-129	-112	-98	-84	-48	-16	-7	-6	-4	-3	-3	-2	-2	0	1	4	5	10	11	11	-717	27
28	-742	-13	-13	-12	-11	-10	-8	-6	-5	-4	-4	-3	-3	-1	0	3	8	11	15	18	19	19	-710	28
29	-746	-17	-13	-9	-8	-7	-5	-4	-3	-2	-2	-1	-1	0	2	3	5	7	8	10	11	12	-716	29
30																								30
	-1027	-287	-219	-187	-168	-126	-43	-15	-5	-3	-2	-729	1	4	6	7	9	17	22	41	48	52	-674	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBw (or dB)

Table C1 Summary of monthly propagation statistics (Page 1 of 15).

Path: LACY ISLAND to CAPE WARWICK - OCTOBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01													3	2	7	8	12	-1	-10	-18	-10	-2	-1	-1
02	2	3	0	1	1	2	2	2	2	3	4	6	8	3	2	1	-1	-3	-4	-5	-4	-5	-4	-4
03	-3	-3	-2	-2	-2	-2	-2	-1	-1	-2	-3	-3	-3	-3	-3	-2	-2	-2	-2	-1	-2	-3	-4	-3
04	-2	-3	-3	-3	-3	-3	-4	-3	-1	0	-1	-2	-1	0	-1	0	0	-1	-1	-1	-1	-1	-2	-1
05	0	0	2	0	0	0	0	-1	-2	0	2	0	-1	-1	-2	-1	-1	-1	-1	-1	-1	-1	0	0
06	-1	-1	-1	-1	0	0	0	0	2	3	0	0	1	-2	2	1	0	-1	0	-4	-4	-1	-1	-1
07	-1	-1	-1	-1	-2	-1	0	0	0	0	0	0	0	0	0	-1	-1	-1	0	0	-1	0	-1	-1
08	-1	0	0	0	0	0	0	0	2	1	1	1	1	0	0	0	0	0	2	0	-1	-1	-2	-1
09	-1	0	1	1	0	-1	-1	-1	-2	-3	-4	-4	-4	-4	-3	-3	-2	-2	-1	0	1	2	2	3
10	3	3	2	1	1	1	1	1	0	1	1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-1
11	0	-1	-1	-1	-1	-1	-1	-1	0	-1	-2	-2	-2	-2	-1	-1	-1	0	1	4	3	3	2	3
12																								
13	7	8	8	8	4	5	5	4	4	3	3	1	2	-1	-1	-1	-1	-1	0	-1	-1	-1	2	0
14	1	-1	-1	-1	0	-1	-1	-3	-2	-2	-2	-1	-1	0	0	0	-1	-1	0	0	-2	0	1	2
15	2	2	2	2	2	2	2	2	2	1	1	1	0	1	2	2	1	0	0	0	0	1	-1	1
16	0	-1	2	1	-1	1	1	1	-1	1	1	1	1	1	-1	1	2	0	0	0	1	1	-1	-1
17	-1	-1	-1	-3	-3	-3	-3	-1	-1	-3	-1	-3	-1	-3	-1	-1	-1	0	0	-1	-1	1	0	0
18	0	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	0	-3	-4	-3	-3	1	-2	-3	1	1	1
19	-3	0	-2	-2	0	0	-1	-1	-3	-2	-3	-3	-1	-2	-2	-1	-1	-1	-1	-1	-2	-3	-5	-3
20	-3	-3	-3	-4	-4	-3	-2	-2	-4	-4	-3	-5	-5											
21													-1	-1	-1	-1	-4	-2	-2	0	0	-1	-1	-1
22	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-5	-4	-5	-4	-4	-3	-3	-3	-3	-1	-1	-3
23	-3	0	-4	-4	-4	-4	-3	-3	-1	-1	-3	-3	-2	-2	0	-1	1	1	2	0	0	0	1	-3
24	-3	-3	-3	-4	-2	-3	-3	-2	-2	-2	-2	-3	-1	-2	-3	-2	-2	-2	-2	-2	-2	-1	-2	0
25	-2	0	0	0	0	0	0	0	0	0	1	0	0	0	-1	-1	-2	-1	-3					
26																								
27																								
28															0	0	0	0	1	0	0	0	-1	-1
29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	1	2	2	3	3	3	3	4	4	4
30	4	1	-1	-2	-3	-3	-3	-3	-3	-3	-3	-4	-4	-4	-4	-4	-4	-3	-1	2	2	2	2	2
31	2	2	4	8	3	2	3	2	6	3	3	2	2	2	2	-4	2	3	3	4	4	4	4	4
	-1	0	0	0	0	-1	-1	-1	0	0	0	0	0	0	-1	-1	0	0	0	0	0	0	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-759	-28	-27	-22	-21	-20	-16	-13	-8	-3	-2	-1	1	3	6	9	13	18	19	26	26	27	-702	01
02	-736	-8	-8	-8	-8	-8	-5	-4	-3	-2	1	1	2	2	3	5	6	7	7	8	8	10	-719	02
03	-742	-12	-10	-7	-6	-5	-4	-4	-3	-3	-2	-2	-2	-1	-1	-1	0	0	0	1	1	1	-728	03
04	-738	-8	-8	-6	-5	-5	-4	-4	-3	-2	-2	-1	-1	-1	0	1	1	2	3	4	5	5	-725	04
05	-734	-4	-4	-3	-3	-2	-2	-2	-1	-1	-1	-1	0	0	1	2	2	3	3	5	5	5	-724	05
06	-738	-8	-7	-6	-5	-5	-4	-2	-2	-1	-1	0	0	1	1	2	3	3	4	6	6	6	-723	06
07	-732	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	0	0	0	0	1	1	1	1	2	2	2	-728	07
08	-744	-14	-11	-3	-3	-2	-2	-2	-1	0	0	0	1	1	1	2	2	2	3	5	7	9	-720	08
09	-735	-5	-5	-5	-5	-5	-4	-4	-3	-2	-2	-1	0	1	1	2	3	3	3	4	4	4	-726	09
10	-733	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	0	0	1	1	2	3	4	5	6	7	7	-723	10
11	-736	-6	-3	-3	-3	-3	-2	-2	-1	-1	-1	0	0	1	2	3	4	4	4	5	5	5	-724	11
12																								12
13	-735	-5	-4	-2	-2	-2	-2	-2	-1	-1	2	3	3	5	7	8	8	8	9	9	9	10	-718	13
14	-738	-8	-4	-3	-3	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	6	6	7	-723	14
15	-733	-3	-3	-3	-2	-1	0	0	1	1	1	1	2	2	2	2	4	5	6	6	6	6	-724	15
16	-735	-5	-5	-2	-2	-2	-2	-1	0	0	0	1	1	1	2	2	3	3	3	6	6	6	-723	16
17	-735	-5	-5	-3	-3	-3	-3	-3	-2	-2	-2	-2	-1	-1	0	1	1	1	2	3	3	3	-727	17
18	-755	-25	-19	-8	-4	-4	-4	-3	-2	-1	-1	0	0	0	1	1	1	1	2	2	2	3	-728	18
19	-756	-26	-20	-4	-4	-4	-4	-3	-2	-1	-1	-1	0	0	0	1	1	1	1	1	1	2	-727	19
20	-735	-5	-5	-5	-5	-5	-5	-5	-5	-4	-4	-3	-1	-1	0	0	1	1	1	1	1	1	-729	20
21	-738	-6	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-1	-1	-1	0	0	0	0	1	0	1	-728	21
22	-738	-8	-7	-5	-5	-5	-5	-4	-4	-3	-1	-1	-1	0	0	0	1	1	1	1	1	2	-727	22
23	-735	-5	-5	-5	-5	-5	-5	-4	-2	-2	-1	-1	0	0	1	2	2	2	2	5	5	5	-725	23
24	-739	-9	-8	-5	-5	-5	-4	-4	-3	-3	-3	-2	-2	-1	0	1	1	1	1	2	2	2	-722	24
25	-734	-4	-4	-4	-4	-3	-2	-1	-1	-1	-1	0	0	0	0	0	1	3	4	5	5	5	-725	25
26																								26
27																								27
28	-731	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	1	1	1	1	1	1	-729	28
29	-731	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	2	3	4	6	7	8	8	9	9	9	-721	29
30	-734	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-2	-1	1	3	4	4	5	7	7	7	-723	30
31	-740	-8	-8	-8	-8	-6	-3	1	2	2	3	3	4	5	6	7	7	7	7	7	7	8	-721	31
	-759	-23	-18	-7	-5	-5	-4	-3	-2	-1	-1	-730	0	1	1	3	4	8	7	13	17	24	-702	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 2 of 15).

Path: LACY ISLAND to CAPE WARWICK - NOVEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	3	3	4	0	0	3	3	1	0	-2	-2	-2	-2	-2	-4	-8	-7	-7	-10	-10	-10	-7	-8	-8
02	-6	-5	-3	-3	-2	-1	2	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	0	0
03	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	-5	1	1	1	0
04	-3	1	-1	0	-1	-3	-4	-1	-4	-3	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0
05	-1	0	0	0	0	0	-1	-1	-1	0	-1	0	0	0	0	0	0	-2	-2	-2	-2	-2	-2	-2
06	-2	-2	-2	-2	-2	1	-2	1	1	1	-2	-2	1	-2	-2	1	1	1	-1	-1	-2	-2	-1	-2
07	-4	-4	-3	-2	-1	2	2	2	3	3	3	3	3	0	0	-2	-2	-2	-2	-2	-2	-1	2	0
08	0	0	3	2	-1	-1	-4	-4	-5	-5	-5	-5	-6	-6	-6	-6	-6	-6	-6	-4	-3	-3	0	0
09	1	1	1	1	1	2	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-1	-1	-2	-2	-2	-5	-2	-2
10	-3	-2	-4	-2	-2	-5	-6	-5	-5	-2	-4	-4	-1	-4	-5	-4	-4	-7	-6	-6	-3	0	-3	-3
11	-1	-7	-7	-7	-7	-7	-5	-8	-7	-5	-5	-5	-4	-4	-2	-2	-2	-2	-3	-6	-5	-7	-7	-8
12	-11	-11	-11	-12	-12	-12	-15	-12	-11	-10	-9	-9	-9	-6	-6	-6	-6	-6	-6	-6	-7	-7	-7	-7
13	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-8	-8	-8	-6	-5	-5	-5	-7	-7	-5	-5	-5	-3
14	-3	-3	-3	-3	-3	-3	-6	-6	-3	-5	-5	-2	-2	-5	-3	-4	-4	-1	-1	-1	-1	-1	-2	-2
15	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2					0	0	0	0	-1	-1
16	-1	-1	-1	-2	-3	-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
17	2	2	3	6	1	1	1	2	2	3	4	4	4	4	7	7	7	7	7	7	7	7	4	4
18	4	5	3	4	3	3	4	4	4	4	4	4	4	3	3	3	4	4	4	3	3	3	2	2
19	2	2	2	2	2	2	2	3	3	3	3	0	2	2	2	2	2	2	3	3	5	5	5	4
20	4	4	4	4	-6	4	-6	4	4	4	4	4												
21														2	2	2	2	2	2	2	1	1	1	1
22	1	1	0	0	0	0	0	-3	-3	-1	-4	-4	-4	-4	-4	-4	-1	-4	0	0	0	0	0	0
23	0	0	0	0	0	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4
24	3	3	3	0	0	3	1	1	1	1	1	1	1	1	1	1	3	2	2	2	0	0	0	0
25	0	0	2	0	-2	1	-1	-1	2	1	0	5	10	15	5	-6	-1	2	-1	-1	-1	2	3	2
26	2	2	-1	-1	-1	-7	-3	-5	-2	-8	-8	-8	-7	-7	-5	-2	-6	-8	-7	-2	-7	-6	-3	-6
27	-7	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-4	-1	0	-3	-3	-3	0	-3	-4
28	-5	-5	-5	-4	-4	-7	-4	-4	-4	-7	-7	-4	-6	-3	-4	-4	-4	-5	-3	-2	5	1	3	2
29	-3	-3	-4	-4	-2	2	2	3	3	3	3	6	7	8	11	7	-19	-37	-61	-69	-113	-144	-138	-148
30	-67	-44	-56	-44	-15	-12	-8	0	-3	-3	-16	-18	-6	2	3	2	-2	0	0	1	0	-1	-4	2
	0	0	0	0	0	0	0	1	0	0	-1	-1	-1	0	-1	-1	-1	-1	0	0	0	0	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBw or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-742	-13	-13	-12	-12	-10	-8	-8	-7	-7	-3	-2	-1	0	2	3	4	5	7	9	9	9	-687	01
02	-737	-8	-8	-8	-7	-4	-3	-3	-1	0	0	1	1	1	1	5	6	6	8	8	8	8	-718	02
03	-740	-11	-11	-11	-11	-11	-10	-9	-6	-4	-1	-1	0	0	0	1	4	5	5	6	6	6	-720	03
04	-736	-7	-7	-6	-6	-6	-5	-4	-2	-1	-1	-1	0	0	0	0	4	5	5	9	10	10	-719	04
05	-734	-5	-5	-5	-5	-5	-1	-1	-1	-1	0	0	0	0	0	1	1	1	1	4	4	5	-719	05
06	-734	-5	-5	-5	-5	-5	-4	-4	-3	-2	-2	-1	0	1	1	2	2	2	2	2	2	21	-698	06
07	-733	-4	-4	-4	-4	-4	-4	-3	-3	-2	-1	1	2	2	3	3	3	4	4	4	4	4	-725	07
08	-735	-6	-6	-6	-6	-6	-6	-6	-6	-6	-4	-1	-1	1	2	2	3	3	3	3	3	3	-719	08
09	-737	-8	-8	-6	-4	-4	-3	-3	-3	-2	-1	0	1	1	2	2	3	3	3	3	3	4	-722	09
10	-742	-13	-13	-13	-12	-8	-7	-4	-3	-2	-2	-2	-2	-1	-1	0	0	4	5	5	5	5	-724	10
11	-748	-18	-18	-17	-14	-8	-8	-8	-7	-5	-3	-3	-2	-2	-1	-1	-1	-1	0	0	0	0	-728	11
12	-754	-18	-18	-18	-18	-17	-16	-15	-12	-11	-8	-7	-7	-7	-6	-6	-6	-6	-5	-2	-1	0	-728	12
13	-742	-13	-13	-8	-8	-8	-8	-8	-8	-7	-7	-7	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	-730	13
14	-738	-9	-9	-8	-8	-7	-7	-8	-5	-4	-3	-3	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-730	14
15	-732	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	0	2	3	3	3	3	3	3	-726	15
16	-732	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	0	1	1	2	4	6	6	7	7	7	-722	16
17	-728	1	1	1	1	1	1	1	2	6	6	6	6	7	7	7	7	7	7	7	7	7	-704	17
18	-727	2	2	2	2	2	2	2	2	3	3	3	3	4	4	6	7	8	8	8	8	9	-687	18
19	-732	-3	-3	-1	1	1	1	1	2	2	2	2	2	3	4	5	6	6	7	8	9	9	-719	19
20	-747	-18	-18	-18	-18	-18	-17	-16	-13	-11	-8	-8	-4	-1	1	3	8	8	8	9	9	9	-707	20
21	-728	1	1	1	1	1	1	1	1	1	1	1	2	2	2	6	6	7	7	7	7	7	-722	21
22	-738	-7	-7	-7	-7	-8	-5	-4	-2	-1	-1	-1	0	0	0	1	4	6	6	6	8	8	-723	22
23	-747	-18	-17	-13	-7	-1	-1	-1	0	1	1	2	2	3	3	4	4	4	5	5	6	8	-720	23
24	-731	-2	-2	-2	-2	-1	-1	0	1	2	3	3	4	4	4	4	5	5	5	5	5	5	-708	24
25	-738	-8	-8	-7	-7	-6	-5	-2	-1	0	1	2	3	4	5	8	12	16	16	16	16	16	-708	25
26	-745	-14	-14	-12	-11	-10	-8	-9	-8	-5	-4	-3	-2	-1	0	1	2	2	3	7	7	7	-722	26
27	-742	-13	-13	-7	-8	-5	-5	-5	-4	-4	-3	-2	-1	-1	0	1	2	2	2	3	3	4	-725	27
28	-739	-10	-10	-9	-8	-8	-8	-5	-5	-5	-4	-4	-4	-3	-2	3	8	9	9	11	12	13	-716	28
29	-877	-148	-148	-148	-148	-148	-145	-138	-70	-24	-5	-3	2	3	5	8	10	13	14	17	18	20	-709	29
30	-808	-77	-77	-75	-73	-68	-58	-48	-21	-10	-4	-3	-1	0	3	4	8	8	13	17	18	18	-711	30
	-877	-148	-147	-110	-57	-13	-8	-7	-3	-2	-1	-729	1	2	3	4	6	7	8	16	16	16	-887	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBw (or dB)

Table C1 Summary of monthly propagation statistics (Page 3 of 15).

Path: LACY ISLAND to CAPE WARWICK - DECEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-5	-4	-3	-3	-4	-4	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-3	-1	1	-2	-2	-2
02	-2	1	1	-2	0	-1	-1	-1	-1	-1	-2	-3	-2	-2	0	-2	-2	-2	-2	-3	-3	-4	-3	-1
03	-2	-2	-3	-4	-4	-4	-4	-1	-1	-1	-1	-1	-1	-1	-1	-3	-6	-6	-5	-5	-5	-4	-5	-5
04	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-3	-4	-1	-4	-1	-1	-1
05	-1	-1	-3	1	-10	-7	-1	-1	2	4	1	-1	-2	-3	-3	-3	-1	-2	-2	-2	-2	1	-3	-3
06	-3	-3	-3	-2	-2	-2	-5	-2	-2	-2	-2	-2	-3	-3	-3	-3	-4	-3	0	-3	0	0	-1	-1
07	-1	-1	-1	-1	-1	-1	-1	-1	0	-2	-2	0	0	0	0	0	0	0	-2	-2	-1	-1	-2	-2
08	-2	-2	-2	-1	-1	-2	-2	-1	0	-1	-1	-1	-1	-4	-6	-4	-6	-6	-6	-6	-6	-6	-6	-6
09	-8	-8	-8	-8	-8	-8	-8	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-8	-5	-2	-2	-2	-2	-2
10	-2	-2	-2	-2	-2	-2	-2	-5	-5	-5	-2	-2	-3	-4	-4	-4	-4	-4	-5	-2	-2	-5	-2	-2
11	-2	-13	-2	-2	-2	-1	1	1	1	1	-1	-1	-2	-1	-1	-2	-2	-2	-2	-1	0	0	0	0
12	0	2	-1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4
14	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	4	4	4	4	6	6	6	6	4
15	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	3	3	3	2	2
16	2	2	2	2	2	3	3	3	3	1	3	3	3	3	4	4	4	1	0	0	1	1	1	1
17	1	1	1	1	-1	-1	2	-2	-2	-1	-1	-1	-1	-1	-1	-1	0	0	0	-3	0	-2	-2	0
18	0	0	0	0	-1	-1	1	0	2	1	1	1	2	4	4	4	4	4	3	3	3	-1	-1	-1
19	-3	0	1	-2	-5	-4	-1	-1	-1	-3	-3	-3	-3	-4	1	-2	0	-3	-2	-4	-4	-3	-1	-1
20	0	-3	-1	-1	-2	0	0	0	3	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2
21	2	2	2	3	1	4	3	3	3	3	5	3	3	3	3	3	3	3	3	3	3	3	3	3
22	3	4	2	2	4	4	4	3	2	2	2	2	2	2	2	3	4	4	4	4	4	4	4	4
23	4	4	4	4	4	1	-13	-10	-9	2	3	0	0	0	-1	-1	-1	0	0	-3	-2	-2	-2	-2
24	-2	-3	-2	-2	1	1	-2	0	0	0	0	0	0	-1	-1	-1	3	0	0	0	3	3	3	3
25	3	3	3	3	3	3	3	3	3	0	-2	-2	-1	-1	-1	0	0	0	1	-2	1	-3	-3	-3
26	-3	-3	-4	-4	-5	-3	-2	-1	-1	-2	-2	-1	0	0	0	3	3	3	3	2	-5	-14	1	5
27	3	-3	1	3	3	3	0	2	4	-1	8	14	18	19	8	5	4	1	-2	-4	-5	-5	-5	-5
28	-7	-7	-7	-4	-4	-4	-4	-6	-6	-6	-6	-6	-6	-8	-8	-8	-8	-7	-7	-7	-7	-7	-7	-7
29	-8	-5	-7	-9	-9	-9	-8	-8	-9	-8	-9	-6	-9	-8	-9	-11	-11	-11	-11	-7	-8	-8	-7	-7
30	-7	-8	-8	-8	-8	-8	-10	-8	-8	-10	-10	-10	-13	-15	-12	-8	-8	-8	-8	-8	-10	-8	-7	-5
31	-8	-5	-5	-5	-5	-5	-3	-4	-4	1	-5	-5	-5	-5	-4	-3	-3	-2	0	-5	-5	0	2	-4
	-1	-1	-1	0	-1	0	0	0	0	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	-1	-1	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-732	-7	-7	-7	-7	-6	-4	-4	-3	-2	-2	-1	-1	0	0	0	1	1	1	3	4	4	-720	01
02	-731	-6	-6	-5	-5	-5	-4	-3	-3	-2	-2	0	1	1	2	2	2	3	3	3	3	3	-722	02
03	-731	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	-2	-1	-1	-1	0	0	3	3	4	4	4	-703	03
04	-731	-8	-8	-8	-8	-8	-8	-8	-8	-8	-5	-5	-5	-4	-2	-1	0	0	0	0	0	2	-721	04
05	-747	-16	-16	-15	-13	-10	-7	-4	-3	-2	-1	-1	0	1	2	3	4	7	7	8	8	8	-717	05
06	-732	-7	-5	-5	-5	-5	-4	-4	-3	-3	-3	-2	-2	-2	-1	0	0	1	1	1	1	2	-723	06
07	-743	-14	-8	-8	-8	-6	-5	-5	-3	-2	-2	-1	-1	-1	0	2	3	3	4	4	4	4	-704	07
08	-731	-8	-8	-8	-8	-8	-8	-8	-8	-8	-5	-3	-2	-1	-1	1	3	3	4	4	4	4	-705	08
09	-732	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-3	-3	-2	-2	-2	-1	2	-708	09
10	-732	-7	-7	-7	-7	-7	-8	-8	-5	-4	-4	-3	-3	-2	-2	-1	-1	-1	-1	-1	-1	-1	-708	10
11	-748	-24	-24	-24	-23	-23	-21	-18	-13	-7	-2	-2	-1	1	3	3	4	4	4	4	4	6	-717	11
12	-728	-3	-3	-2	-2	-2	-2	-2	-1	-1	0	0	1	1	1	2	2	3	3	3	3	5	-702	12
13	-723	2	2	2	2	2	2	2	2	2	2	2	2	3	4	5	6	6	6	6	6	30	-687	13
14	-724	1	1	1	1	1	2	2	3	3	3	4	4	5	5	6	6	6	6	6	6	6	-688	14
15	-723	2	2	2	2	2	2	2	2	2	3	3	4	4	5	5	6	6	6	6	6	22	-686	15
16	-727	-2	-1	-1	-1	-1	0	0	1	1	2	2	3	3	3	5	6	6	7	7	7	7	-708	16
17	-733	-8	-7	-4	-3	-3	-3	-2	-2	-1	-1	-1	0	0	1	2	2	3	4	6	6	6	-718	17
18	-731	-5	-2	-2	-2	-2	-2	-1	-1	0	1	2	3	3	4	4	4	5	5	8	8	8	-700	18
19	-732	-7	-7	-7	-7	-6	-5	-5	-4	-3	-3	-2	-1	0	0	1	1	2	2	2	2	3	-722	19
20	-730	-5	-5	-4	-4	-3	-2	-1	1	1	1	2	2	2	2	3	3	3	3	3	3	3	-708	20
21	-738	-14	-14	-12	-10	-7	1	1	2	3	4	5	5	5	6	6	6	6	6	6	6	38	-687	21
22	-723	2	2	2	2	2	2	2	2	2	2	3	4	4	5	5	8	8	8	8	8	32	-687	22
23	-743	-18	-18	-18	-18	-18	-16	-9	-1	-1	0	1	2	3	4	5	6	6	6	8	10	10	-702	23
24	-728	-4	-4	-4	-4	-4	-2	-1	-1	0	0	1	1	1	2	3	3	4	4	5	5	5	-720	24
25	-728	-4	-4	-4	-4	-4	-4	-3	-2	-1	0	1	2	2	3	3	3	3	3	3	3	3	-721	25
26	-743	-18	-18	-18	-17	-15	-10	-5	-4	-3	-2	-1	2	2	3	3	4	10	14	18	19	19	-701	26
27	-733	-8	-8	-8	-8	-6	-6	-5	-3	0	2	3	3	6	7	15	19	20	22	24	24	24	-701	27
28	-735	-10	-10	-9	-9	-9	-9	-9	-9	-9	-7	-6	-5	-4	-4	-3	-3	-3	-3	-2	-2	-2	-720	28
29	-737	-12	-12	-12	-12	-12	-12	-11	-8	-7	-7	-7	-6	-6	-6	-6	-5	-3	-2	-1	-1	0	-725	29
30	-740	-15	-15	-15	-15	-15	-11	-11	-10	-10	-10	-9	-8	-7	-5	-4	-4	-3	-3	-3	-2	-2	-727	30
31	-736	-11	-11	-10	-8	-7	-6	-6	-6	-5	-5	-4	-2	-1	0	1	1	4	5	5	5	7	-717	31
	-748	-22	-18	-13	-11	-10	-9	-9	-1	-2	-1	-725	1	2	3	5	8	8	7	20	23	24	-688	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 4 of 15).

Path: LACY ISLAND to CAPE WARWICK - JANUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	0	-12	-14	-18	-8	-8	-1	-5	-5	-5	-4	-4	-3	-3	-2	-6	-7	-8	-8	-6	-5	-5	-5	-5
02	-5	-4	-4	-5	-6	-7	-8	-8	-8	-5	-5	-6	-6	-6	-4	-4	-2	-2	-2	-2	-2	-2	-2	-2
03	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-5	-2	-5	-2	-2	-5	-5	-5	-5	-5	-5
04	-2	-2	-3	-4	-4	-4	-1	-1	-1	-1	-1	-1	0	-1	-1	-1	-4	-1	-4	-1	-4	-4	-4	-4
05	-4	-1	-1	-4	-2	-2	-2	-2	-2	-2	-2	-2	0	0	0	0	0	0	0	-1	0	0	0	0
06	0	0	0	0	1	3	3	-2	0	3	1	0	0	3	0	4	7	5	3	1	-4	-4	-8	-6
07	-3	-1	-4	2	0	2	-1	-1	-5	-3	-8	1	-1	-2	0	1	1	0	0	0	0	0	-1	-1
08	-1	-1	-1	-1	0	0	0	0	0	0	0	2	-1	0	0	-1	-1	-1	-1	-2	-3	-1	-2	-3
09	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	2	3	0	-1	2	3	3	4	3	5	2	3	-1
10	3	2	4	4	4	4	4	4	1	1	4	2	2	0	2	3	2	1	1	1	2	1	1	1
11	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-2	-3	-3	-3	-2	-2	-2	-2	-2	-2
12	-2	-2	-2	-2	-2	-2	-2	-2	-3	-2	-2	0	3	0	-1	-1	1	0	2	6	2	1	-5	-2
13	-6	-12	-1	-5	-13	-13	-10	-7	-10	-7	-9	-8	-4	-5	0	-1	0	-1	-1	-3	-3	-1	-1	-1
14	-1	-1	-4	-4	-4	-4	-4	-4	-4	-4	-4	-1	-4	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	-2
15	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	0	0	0	0	0	-1	-1
16	-1	0	-3	-3	-26	-1	-4	-4	-2	-6	-10	-15	-13	-1	7	4	1	-1	-3	-1	-1	1	1	0
17	0	0	0	-1	-1	1	1	1	4	1	1	1	2	4	4	4	4	4	4	4	4	4	4	4
18	4	4																						
19																					2	2	4	1
20	4	4	3	3	3	3	3	4	4	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2
22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	3	3	5	7	3	4	5	3
23	3	1	3	3	0	3	3	3	3	4	4	4	4	1	1	4	2	2	2	0	0	1	1	1
24	-5	-8	-6	-7	-6	-6	-5	-5	-2	-2	-5	-2	-2	-2	-2	-2	-2	-2	-2	-5	-5	-7	-7	-7
25	-7	-10	-12	-10	-7	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-4	-8	-8	-8	-8	-8	-4	-1
26	-2	-2	-3	-1	-1	1	0	0	-1	-1	1	1	1	1	1	1	0	-1	-1	-2	-2	-1	0	0
27	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	2	2	2	2	0
28	0	0	0	0	0	0	0	0	3	1	1	0	-1	-1	-3	-2	-4	-4	-4	-4	-5	-5	-3	-4
29	-2	-4	-2	-2	-2	-4	-4	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
30	-3	-3	-6	-6	-6	-6	-6	-6	-6	-3	-3	-3	-3	-3	-3	-6	-6	-6	-6	-1	2	2	0	-3
31	2	2	2	2	2	2	2	2	3	3	2	1	1	2	2	2	2	2	2	2	2	0	2	2
	-1	-1	-1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-748	-22	-22	-21	-20	-18	-12	-11	-7	-6	-6	-5	-5	-4	-3	-1	0	0	2	5	5	5	-721	01
02	-738	-10	-10	-10	-10	-10	-9	-8	-8	-8	-5	-5	-3	-3	-2	-2	-2	-1	-1	-1	-1	-1	-709	02
03	-733	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-4	-3	-3	-2	-2	-2	-2	0	2	3	-723	03
04	-732	-8	-8	-8	-8	-8	-5	-3	-2	-2	-2	-1	-1	-1	-1	-1	-1	2	3	4	4	4	-722	04
05	-732	-6	-6	-6	-6	-6	-5	-5	-4	-2	-2	-1	0	0	1	2	3	3	3	3	3	3	-723	05
06	-738	-12	-12	-7	-7	-7	-6	-2	-1	0	0	1	2	2	3	5	7	8	8	8	8	8	-718	06
07	-737	-11	-10	-8	-6	-6	-6	-5	-1	-1	-1	0	0	1	4	4	5	5	5	5	8	8	-700	07
08	-739	-13	-13	-12	-12	-11	-8	-3	-2	-1	0	1	1	2	2	3	3	3	3	3	4	4	-722	08
09	-738	-13	-7	-7	-6	-5	-3	-2	-1	0	0	1	2	2	3	6	7	7	8	11	11	15	-710	09
10	-736	-10	-9	-3	-1	-1	0	0	1	2	3	3	4	4	4	5	6	8	7	8	8	8	-718	10
11	-729	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	1	1	2	2	2	3	6	6	6	-720	11
12	-733	-7	-7	-7	-7	-7	-7	-6	-5	-4	-3	-3	-1	1	3	4	4	7	8	9	9	9	-717	12
13	-745	-18	-18	-18	-17	-16	-14	-12	-10	-8	-4	-2	-2	-1	-1	3	4	4	6	8	8	8	-717	13
14	-733	-7	-7	-7	-7	-7	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	2	3	3	3	3	3	-723	14
15	-728	-3	-3	-3	-3	-3	-3	-2	-1	0	0	1	1	2	2	3	3	3	4	4	4	4	-722	15
16	-784	-38	-38	-38	-33	-28	-18	-12	-8	-2	-1	-1	1	1	3	6	7	8	8	12	12	13	-713	16
17	-727	-1	-1	-1	-1	-1	-1	-1	0	1	1	2	2	3	3	4	4	4	4	6	7	8	-718	17
18	-722	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-722	18
19	-727	-1	-1	0	0	0	0	1	2	3	4	4	4	4	5	5	5	5	5	5	5	5	-721	19
20	-725	1	1	1	1	1	1	1	1	1	1	2	2	3	4	6	6	7	7	7	7	7	-719	20
21	-725	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	5	6	6	-720	21
22	-724	2	2	2	2	2	2	2	2	2	2	2	2	2	3	6	7	7	7	7	10	11	12	-708	22
23	-728	-2	-2	-1	-1	-1	0	0	1	2	2	3	3	4	4	5	5	6	7	7	7	7	-702	23
24	-736	-10	-10	-10	-10	-10	-8	-7	-4	-3	-3	-3	-3	-2	-2	-2	-2	-2	-1	1	1	2	-723	24
25	-738	-12	-12	-12	-12	-12	-12	-10	-7	-7	-7	-7	-6	-6	-6	-4	-2	-1	0	0	0	0	-726	25
26	-730	-4	-4	-4	-4	-3	-3	-3	-2	-1	0	1	2	3	3	4	4	4	4	4	4	5	-721	26
27	-728	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	3	3	3	3	3	3	-719	27
28	-732	-8	-8	-8	-8	-8	-5	-5	-4	-2	-1	0	2	2	3	3	4	4	4	4	4	4	-719	28
29	-733	-7	-7	-7	-7	-7	-7	-6	-6	-5	-5	-4	-3	-3	-2	-2	-2	2	3	3	3	3	-723	29
30	-734	-8	-8	-8	-8	-8	-8	-7	-7	-8	-5	-5	-4	-3	1	2	2	2	2	5	5	6	-718	30
31	-728	-2	-2	-2	-2	-2	-2	-1	-1	0	0	1	1	2	3	5	6	6	7	7	7	7	-716	31
	-784	-37	-25	-14	-12	-8	-7	-5	-3	-2	-1	-728	1	2	3	4	5	6	7	9	10	11	-700	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 5 of 15).

Path: LACY ISLAND to CAPE WARWICK - FEBRUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-4	-4	-4	-4	-8	-4	-4	-4	-5	-4	-4	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	-2
02	0	0	0	0	0	0	0	0	0	1	-1	-1	-1	-1	-1	1	1	0	0	-2	-2	-1	-1	-1
03	-1	-1	-1	-1	-1	-1	1	1	0	0	-1	-1	-2	-2	-2	-2	-2	-1	0	0	1	1	1	1
04	1	1	1	3	3	5	5	2	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
05	0	-2	0	0	0	0	0	0	-2	-2	-2	-2	0	-2	-2	-2	0	1	1	1	1	1	1	1
06	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	1	1	1	-1	1	1
07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	
08	2	2	2	3	0	0	0	0	0	1	0	0	-1	-2	0	-1	-2	0	0	0	0	-2	0	-1
09	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0
10	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0
11	1	1	1	1	1	1	1	2	6	11	10	13	7	6	1	-1	-1	-1	-1	-2	-1	-1	-2	-3
12	-3	-3	-2	-1	-1	-2	-3	-3	-3	-2	-2	-3	-3	-3	-3	-3	-3	-2	-1	-1	-1	-1	-1	-1
13	1	1	1	1	1	1	1	1	1	2	0	0	0	10	-1	0	-1	-2	0	0	0	-1	-1	-2
14	-2	0	0	2	2	2	2	2	2	0	0	0	2	0	0	0	0	0	0	2	2	0	0	
15	2	1	1	4	3	4	1	-1	-1	-1	-1	0	1	3	0	-1	-3	-4	-5	-4	-7	-7	-7	-9
16	-8	-10	-10	-7	-8	-8	-7	-8	-6	-8	-8	-6	-8	-8	-8	-8	-11	-11	-11	-10	-10	-10	-10	-8
17	-5	-5	-5	-5	-8	-6	-6	-4	-3	-3	-1	-2	-1	-2	-2	-1	-2	-2	-1	-1	-1	-1	-1	-1
18	-3	-2	-5	-6	-6	-5	-6	-7	-6	-6	-6	-6	-6	-6	-8	-8	-8	-5	-7	-7	-7	-7	-7	-7
19	-4	-4	-4	-4	-5	-5	-4	-5	-5	-5	-4	-3	-3	0	0	0	-1	0	0	0	0	-1	0	0
20	0	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	0	0	-3	0	0	0
21	1	1	0	1	1	0	2	1	2	0														
22																								
23																								
24																								
25																								
26																								
27																								
28																								
	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-729	-9	-9	-9	-8	-8	-8	-8	-6	-5	-4	-3	-3	-2	-1	-1	0	0	0	0	2	4	-716	01
02	-723	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	0	0	1	1	2	2	2	3	4	5	5	-715	02
03	-726	-6	-6	-6	-6	-5	-5	-3	-2	-2	-1	-1	0	1	1	2	3	4	4	4	4	5	-714	03
04	-720	0	0	0	0	0	0	0	0	0	0	0	1	1	4	5	5	5	5	5	5	8	-710	04
05	-724	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-1	0	0	0	1	1	1	1	3	3	4	-716	05
06	-723	-3	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	0	1	3	4	4	5	5	5	5	8	-714	06
07	-719	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	5	5	6	6	6	-714	07
08	-725	-5	-5	-5	-5	-4	-3	-2	-1	-1	0	0	1	3	4	4	5	5	5	5	5	5	-715	08
09	-721	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	2	2	3	3	4	4	4	-716	09
10	-721	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	1	2	3	3	4	4	4	-718	10
11	-723	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	0	0	2	6	9	12	14	15	18	18	18	-702	11
12	-728	-8	-8	-8	-8	-8	-7	-7	-5	-4	-3	-2	-2	-1	0	0	1	1	1	1	1	1	-715	12
13	-732	-12	-12	-11	-9	-7	-6	-4	-2	-1	0	1	1	1	2	2	5	10	13	15	15	15	-705	13
14	-722	-2	-2	-2	-2	-2	-1	-1	0	0	0	1	1	1	2	2	2	3	3	3	3	3	-717	14
15	-728	-8	-8	-8	-8	-8	-7	-5	-4	-2	-1	-1	0	2	3	5	6	7	9	13	12	12	-708	15
16	-731	-11	-11	-11	-11	-11	-11	-11	-10	-10	-9	-8	-8	-6	-5	-5	-5	-4	-4	-4	-4	-4	-724	16
17	-726	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5	-2	-2	-1	-1	-1	0	0	1	1	1	-719	17
18	-730	-10	-10	-10	-10	-10	-7	-7	-7	-8	-8	-5	-5	-5	-4	-2	-1	-1	-1	0	0	0	-720	18
19	-725	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-1	-1	-1	0	0	0	0	1	1	1	1	-719	19
20	-725	-5	-5	-5	-5	-5	-4	-4	-3	-2	-2	-1	-1	-1	0	0	0	0	1	3	3	3	-717	20
21	-721	-1	-1	-1	-1	-1	-1	-1	0	1	1	2	2	2	3	3	3	4	4	4	4	4	-716	21
22																								22
23																								23
24																								24
25																								25
26																								26
27																								27
28																								28
	-732	-12	-12	-11	-10	-9	-8	-5	-2	-1	-1	-720	0	1	1	3	4	5	9	15	18	18	-702	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 6 of 15).

Path: LACY ISLAND to CAPE WARWICK - MARCH 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																								
13																								
14																								
15																								
16	-2	-2	-2	-1	-1	-1	0	1	4	10	6	1	1	0	1	1	-2	-1	-1	-2	-3	-2	-1	
17	28	21	-41	-110	-145	-38	-87	-108	-29	15	9	-9	-87	-192	-143	-91	-58	-40	-25	-34	-105	-144	-84	-74
18	-57	-38	11	3	-4	-1	-1	-1	1	1	0	1	-1	-2	-2	-2	-2	-2	-2	-2	-1	-2	-6	-6
19	-7	-7	-8	-8	-7	-4	-3	-5	-8	-5	-8	-6	-5	-4	-7	-4	-3	-4	-3	-3	3	8	10	8
20	10	6	6	7	6	11	17	8	1	0	11	17	4	7	6	7	0	11	-2	-6	-2	-2	0	0
21	0	-8	-11	-4	0	0	1	-1	-1	-1	0	0	0	-1	-2	-2	-3	-2	-2	-2	-2	-1	0	0
22	1	1	1	2	2	2	6	6	1	6	3	2	3	2	1	0	-1	0	0	0	0	1	0	1
23	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	0	0	-1	-1	-1	0	0	0
24	0	-2	1	2	3	1	2	0	1	-1	-2	-2	-2	-2	-3	-3	-4	-4	-2	-2	-2	-1	1	1
25	6	4	8	4	1	2	1	1	0	1	2	5	3	1	-3	-1	-1	-2	-2	-2	-1	-1	0	2
26	2	1	1	2	2	3	3	3	3	4	6	12	19	-16	-10	-2	-5	-4	2	2	1	1	2	1
27	1	1	1	-1	0	0	-1	-3	-3	-7	-3	-3	-2	-2	-4	-3	-3	-2	-1	0	1	1	2	2
28	2	2	3	3	3	2	2	2	2	3	5	6	7	7	4	2	1	1	1	0	0	1	1	3
29	1	3	3	1	2	1	5	2	4	4	3	5	1	1	0	-1	-2	-1	-1	0	1	2	2	0
30	1	2	1	3	3	3	3	1	0	-1	-2	-3	-3	-3	-3	-3	-3	-3	-3	-2	-3	-3	-2	-2
31	-2	-1	-1	-1	-1	-1	0	-1	-1	0	-1	-1	-2	-1	-2	-2	-1	0	0	1	-2	-1	-1	-1
	1	1	1	1	1	1	1	1	1	1	1	1	0	-1	-2	-2	-2	-2	-1	-1	-1	0	0	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12																								12
13																								13
14																								14
15	-730	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-2	-1	-1	-1	-1	0	0	0	0	0	0	-725	15
16	-731	-5	-4	-4	-3	-3	-2	-2	-1	-1	0	0	1	3	8	12	24	32	34	36	36	37	-689	16
17	-864	-237	-228	-215	-208	-194	-158	-142	-118	-84	-75	-57	-40	-28	-10	13	24	28	30	31	31	32	-694	17
18	-802	-78	-75	-71	-67	-58	-44	-7	-4	-2	-2	-1	-1	0	1	2	4	11	14	17	17	18	-708	18
19	-744	-18	-17	-10	-8	-8	-8	-7	-6	-6	-5	-4	-4	-3	-2	6	10	12	13	15	16	16	-709	19
20	-739	-13	-11	-9	-8	-8	-4	-3	-1	1	2	5	8	8	10	14	17	20	21	22	22	23	-703	20
21	-743	-17	-17	-15	-14	-13	-9	-4	-3	-2	-2	-1	-1	0	0	1	1	2	3	4	5	5	-721	21
22	-732	-8	-8	-5	-3	-3	-1	-1	0	0	1	1	1	2	3	5	7	8	9	10	10	10	-718	22
23	-731	-5	-5	-4	-3	-2	-1	-1	0	0	1	1	1	1	2	2	2	2	3	3	3	3	-723	23
24	-733	-7	-7	-6	-6	-5	-5	-4	-3	-2	-2	-1	0	1	2	3	3	5	6	8	8	8	-718	24
25	-730	-4	-4	-4	-4	-3	-3	-2	-1	-1	0	1	1	2	3	5	7	10	11	13	13	14	-701	25
26	-755	-29	-29	-28	-26	-23	-11	-5	0	1	1	2	2	3	3	6	13	20	23	25	25	26	-700	26
27	-740	-14	-14	-9	-8	-7	-5	-4	-3	-2	-2	-1	0	1	1	2	2	2	3	4	5	6	-720	27
28	-729	-3	-3	-2	-1	-1	0	0	1	1	2	2	3	3	4	6	7	8	8	9	9	9	-716	28
29	-730	-4	-4	-3	-3	-3	-2	-1	0	0	1	2	2	3	3	5	5	6	6	7	8	8	-717	29
30	-730	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-1	1	2	3	4	4	5	5	6	6	-720	30
31	-730	-4	-4	-3	-3	-3	-2	-2	-2	-2	-1	-1	-1	-1	0	1	1	2	3	4	4	4	-722	31
	-864	-225	-199	-145	-128	-88	-25	-5	-3	-2	-1	-726	1	2	3	5	8	15	20	33	34	38	-689	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 7 of 15).

Path: LACY ISLAND to CAPE WARWICK - APRIL 1987

RELATIVE HOURLY MEDIAN (dB)																								
DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-4	-4	-2	0	1	0	-1	-2	-2	-3	-5	-5	-6	-5	-5	-4	0	1	1	0	0	0	0	-2
02	-2	-1	-1	0	1	-2	0	-2	-8	-9	-3	-3	5	6	6	7	7	15	24	10	3	3	4	0
03	2	3	3	2	1	1	1	2	3	2	3	0	1	1	2	2	2	2	2	4	5	6	3	4
04	4	3	5	3	5	4	4	5	4	5	4	5	4	4	4	4	4	4	4	4	5	6	8	5
05	-54	-84	-49	-61	-114	-248	-136	-153	-38	14	-8	-25	-44	-28	-29	-71	-43	-38	-111	-28	2	1	1	2
06	2	3	3	4	4	6	7	7	7	6	10	6	5	5	4	4	4	4	3	3	3	3	3	2
07	2	3	2	3	1	-5	-4	-5	-7	-4	4	13	14	16	3	8	6	4	2	2	4	4	4	4
08	5	5	4	4	5	5	5	5	5	6	5	5	11	9	8	6	4	1	0	-1	0	-3	1	4
09	2	1	0	-1	-1	0	1	1	4	7	4	3	3	1	-1	-1	-2	-2	-1	-2	-2	-2	-2	-2
10	-2	-1	-1	0	0	0	0	-1	1	-4	-4	-1	-1	1	0	-1	-1	-1	-1	-3	-3	-3	-4	-4
11	-2	-1	-1	0	1	2	4	5	5	6	6	6	3	1	0	-1	-1	-1	-2	-3	-3	-4	-4	-4
12	-3	-2	-2	-2	0	1	1	2	4	4	3	2	1	0	-1	-1	-1	-2	-2	-3	-4	-4	-3	-3
13	-2	0	0	0	0	0	0	0	0	0	0	0	-2	-3	-4	-4	-4	-3	-4	-4	-5	-4	-3	-7
14	-7	-7	-8	-6	-5	-3	-3	-2	0	0	-3	-4	-4	-5	-6	-6	-8	-7	-6	-7	-7	-8	-8	-8
15	-7	-7	-6	-6	-5	-5	-5	-5	-4	-5	-5	-4	-5	-5	-4	-5	-4	-5	-4	-4	-4	-4	-4	-4
16	-4	-3	-5	-5	-5	-5	-12	-12	-12	-13	-23	-18	-24	-54	-12	18	35	11	9	-4	-2	-5	-5	-4
17	-5	-3	-4	5	-7	-5	6	21	24	10	2	0	0	1	4	3	-8	-14	-21	-34	-44	-60	-52	3
18	-5	-3	-4	-5	-2	-3	-8	-7	-8	-8	-12	-12	-8	-11	-9	-10	-13	-13	-14	-12	-13	-14	-13	-13
19	-14	-10	-12	-12	-12	-12	-9	-8	-7	-5	-8	-8	-8	-7	-6	-6	-7	-6	-6	-5	-3	-6	-8	-7
20	-10	-11	-11	-11	-12	-14	-15	-11	-9	-8	-7	-4	-6	-8	-9	-9	-10	-12	-12	-9	-9	-9	-8	-8
21	-7	-7	-8	-8	-5	-4	-1	1	1	1	1	2	1	1	1	1	2	1	2	-1	0	0	1	1
22	1	1	-3	-3	-4	-1	1	1	0	1	1	2	1	2	3	3	2	2	2	2	2	2	2	2
23	2	3	4	3	0	-2	-5	-6	-5	-8	-5	-18	-24	-7	-2	-4	2	2	2	2	2	3	3	2
24	2	2	1	1	1	2	1	-1	0	2	1	2	1	0	0	0	0	1	1	1	1	1	1	1
25	-1	-2	2	4	4	3	3	3	4	5	5	4	3	5	5	5	5	4	5	5	4	4	5	5
26	4	5	6	6	8	8	8	9	10	9	8	8	7	7	6	6	5	5	5	5	5	5	5	4
27	5	5	8	8	4	4	3	2	2	2	3	2	1	1	0	0	-1	-3	-4	-4	-5	-6	-8	-5
28	-5	-5	-4	-2	5	6	1	-4	-4	-3	-2	2	1	1	3	3	1	-4	-6	-5	-4	-3	-3	-4
29	-5	-2	-4	-5	-14	-18	-9	5	10	0	1	1	-2	-3	-3	-2	-1	-2	-2	-2	-2	-3	-3	-4
30	-5	-5	-5	-4	-4	-4	-4	-4	-3	2	5	5	4	4	5	5	5	5	5	6	6	6	6	6
	-2	-2	-1	0	0	-1	0	0	0	1	1	1	1	1	0	0	0	0	-1	-2	-1	-2	-1	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:																								
DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.98	MAX	DAY
01	-731	-7	-7	-7	-6	-6	-5	-5	-4	-3	-2	-1	0	1	1	2	2	2	3	3	3	4	-720	01
02	-736	-12	-12	-12	-11	-10	-8	-4	-2	-1	0	1	3	5	7	11	18	24	29	33	34	34	-688	02
03	-726	-2	-2	-2	-1	-1	0	0	1	1	2	2	3	3	4	5	6	7	8	8	9	9	-715	03
04	-732	-8	-7	-1	0	1	2	3	3	4	4	4	5	5	5	8	7	9	9	11	11	11	-712	04
05	-1122	-383	-349	-309	-283	-248	-185	-147	-81	-64	-52	-41	-30	-22	-1	3	6	15	18	22	23	23	-701	05
06	-725	-1	1	1	1	1	2	2	3	3	3	4	4	5	6	8	9	10	12	14	15	15	-709	06
07	-733	-9	-9	-9	-8	-8	-6	-5	-1	2	2	3	4	4	6	11	15	17	22	28	28	28	-683	07
08	-728	-4	-4	-4	-4	-3	-2	-1	1	4	4	5	5	6	8	8	10	11	13	15	15	16	-707	08
09	-736	-12	-12	-10	-6	-3	-2	-2	-2	-1	-1	-1	0	1	3	4	6	8	9	10	11	11	-712	09
10	-742	-18	-16	-10	-7	-5	-4	-4	-3	-2	-2	-1	-1	0	0	1	1	2	2	2	3	4	-720	10
11	-729	-5	-5	-5	-5	-5	-4	-4	-3	-2	-1	0	1	2	5	6	7	10	10	11	11	11	-712	11
12	-728	-4	-4	-4	-4	-4	-4	-4	-3	-2	-2	-1	0	1	1	3	4	5	5	6	6	6	-717	12
13	-741	-16	-10	-9	-8	-7	-6	-5	-4	-4	-3	-1	-1	0	0	1	1	1	1	1	2	2	-722	13
14	-738	-12	-12	-10	-10	-9	-8	-7	-7	-6	-6	-5	-4	-3	-1	0	0	1	1	1	1	1	-721	14
15	-732	-8	-8	-8	-8	-8	-7	-6	-5	-5	-5	-5	-4	-4	-4	-4	-3	-3	-3	-3	-3	-3	-726	15
16	-800	-76	-78	-75	-70	-55	-30	-23	-14	-11	-7	-5	-4	-3	-1	13	25	36	41	45	46	47	-677	16
17	-796	-72	-71	-68	-66	-64	-52	-42	-17	-8	-4	-2	0	2	5	9	21	26	27	29	30	30	-684	17
18	-753	-29	-27	-24	-17	-15	-14	-14	-13	-12	-12	-9	-8	-7	-5	-3	-1	0	1	3	3	3	-720	18
19	-740	-16	-16	-15	-15	-14	-13	-12	-11	-9	-8	-8	-7	-6	-6	-5	-3	-3	-2	-1	-1	-1	-724	19
20	-740	-16	-16	-16	-16	-15	-14	-13	-12	-11	-10	-9	-9	-8	-7	-8	-5	-4	-3	-2	-2	-2	-724	20
21	-732	-8	-8	-8	-8	-8	-7	-6	-5	-1	0	0	1	1	2	2	2	3	3	4	4	4	-712	21
22	-729	-5	-5	-5	-5	-4	-4	-3	0	1	1	2	2	2	3	3	3	4	4	4	5	5	-716	22
23	-758	-34	-33	-28	-25	-24	-18	-10	-6	-4	-2	1	1	2	3	4	4	5	5	5	5	6	-718	23
24	-729	-5	-4	-2	-2	-1	-1	-1	0	0	1	1	1	2	2	3	3	3	4	5	5	6	-718	24
25	-733	-8	-8	-4	-3	-3	-1	2	3	4	4	4	5	5	5	6	6	6	7	7	7	8	-714	25
26	-721	3	3	3	3	3	4	4	5	5	6	6	7	7	8	9	9	10	10	11	11	13	-711	26
27	-733	-8	-8	-7	-7	-7	-6	-5	-4	-2	0	1	2	3	4	5	7	8	10	12	13	13	-710	27
28	-731	-7	-6	-6	-6	-6	-5	-5	-4	-4	-3	-3	-1	1	2	4	6	7	7	8	9	9	-702	28
29	-752	-28	-28	-26	-23	-21	-14	-8	-5	-4	-3	-2	-2	-1	-1	2	5	10	15	18	18	18	-705	29
30	-729	-5	-5	-5	-5	-5	-5	-5	-4	-3	2	4	5	5	6	6	7	7	7	8	8	8	-715	30
	-1122	-331	-219	-121	-87	-42	-14	-8	-5	-4	-2	-724	1	2	4	5	7	10	15	34	38	44	-677	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 8 of 15).

Path: LACY ISLAND to CAPE WARWICK - MAY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	12	12	11	11	11	11	11	11	11	11	11	10	9	8	7	6	6	4	4	3	2	0	0	2
02	4	4	4	3	5	6	5	0	-3	-5	-6	-6	-7	-8	-11	-8	-8	-8	-6	-3	-2	-1	1	4
03	3	5	4	5	4	5	3	3	7	1	-1	1	1	0	2	2	0	0	2	2	2	2	2	2
04	2	3	4	5	4	3	2	2	2	2	3	4	6	8	5	2	3	2	2	2	2	2	2	2
05	2	1	2	4	4	4	4	4	5	6	6	3	4	3	0	1	0	3	-5	-3	-2	5	6	-1
06	5	5	6	4	3	3	-1	6	5	4	3	2	2	1	0	-1	-1	-1	-1	-1	-1	0	0	0
07	0	1	1	2	1	-1	-2	2	4	6	6	8	7	6	0	3	6	5	4	5	8	9	11	12
08	12	10	8	8	7	4	2	0	-1	-3	-4	-3	-4	-4	-3	-5	-5	-3	-2	-2	-1	-1	-1	0
09	-2	-4	-5	-5	-6	-5	-5	-5	-6	-6	-5	-4	-5	-5	-6	-6	-6	-6	-7	-7	-6	-6	-6	-6
10	-7	-7	-6	-7	-8	-6	-8	-8	-8	-8	-8	-8	-8	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8
11	-7	-7	-8	-8	-7	-8	-8	-7	-7	-7	-7	-7	-7	-6	-6	-6	-6	-6	-6	-6	-6	-6	-5	-5
12	-4	-4	-4	-3	-2	-2	-1	0	0	-1	0	1	7	-1	-2	-2	-3	-2	-3	-6	-7	-7	-6	-5
13	-6	-4	-3	-3	-13	-18	-7	-3	-4	-2	0	3	-2	-2	-3	-3	-4	-5	-5	-5	-5	-5	-4	-3
14	-2	-3	-3	-3	-3	-3	-3	-3	-2	-1	-3	-4	-4	-3	-3	-2	-3	-2	-2	-2	-2	-2		
15																								
16																								
17	-3	-2	-3	-9	-12	-12	-9	-8	-1	0	0	0	-3	-4	-5	-4	-2	-3	-4	-5	-4	-4	-4	-4
18	3	5	5	6	6	8	8	8	8	6	6	5	0	0	0	0	0	0	1	1	2	3	3	3
19	4	5	4	-5	-2	-2	-1	8	13	4	5	8	8	9	4	2	2	2	2	1	2	2	3	4
20	1	1	3	2	-2	2	-1	-2	-1	1	-3	-3	-3	-1	0	0	1	1	1	1	2	2	2	3
21	1	-2	-2	-4	-1	-8	-18	-23	-8	-3	-9	-4	10	9	7	7	5	4	3	4	4	8	8	4
22	3	3	2	1	0	-2	-3	-3	-3	-1	-3	-2	-2	-3	-5	-5	-5	-4	-5	-6	-5	-4	-4	-6
23	-8	-8	-5	-4	-3	-3	-2	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-2	-2	-1
24	-1	-1	-1	0	0	1	1	1	1	1	2	2	2	2	1	0	0	-1	-3	-3	-3	-4	-3	-2
25	0	0	1	2	5	5	2	2	2	2	2	2	4	2	1	0	0	0	1	1	2	2	2	3
26	5	6	5	6	8	5	5	6	7	7	7	7	7	7	7	5	6	5	6	8	11	8	15	
27	28	21	25	15	-3	-13	-29	-27	-7	-2	-2	-2	0	-1	-1	-1	0	1	-2	-6	-5	-2	0	2
28	4	6	4	6	5	2	1	0	0	4	3	5	6	4	5	4	3	2	2	2	2	2	4	5
29	5	4	3	3	8	5	3	3	2	4	3	3	3	1	0	0	0	0	0	0	-1	-2	-2	-1
30	-2	-1	0	2	-1	-5	-5	-14	-6	-3	-2	-1	-13	-42	-20	23	20	10	2	-1	-1	-2	-4	-4
31	-4	-5	4	3	1	1	2	1	-2	-3	-1	-2	-3	-3	-4	-5	-5	-4	-1	1	-1	-2	-2	-3
	1	1	2	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	-1	-1	-1	-1	0	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-732	-2	-2	-2	-2	-1	0	2	3	5	7	10	10	11	11	12	12	12	13	13	14	15	-715	01
02	-742	-12	-12	-12	-12	-11	-10	-9	-7	-8	-4	-2	0	3	4	5	8	8	7	8	8	8	-721	02
03	-732	-2	-2	-2	-2	-1	-1	0	1	1	2	2	3	4	4	5	6	7	7	8	8	8	-722	03
04	-732	-2	-2	-1	-1	0	1	1	2	2	3	3	4	4	5	6	8	10	11	13	14	14	-718	04
05	-745	-15	-13	-11	-8	-7	-4	-2	0	1	2	3	4	4	5	6	8	11	15	18	18	20	-710	05
06	-745	-14	-3	-3	-3	-2	-1	-1	-1	0	0	1	3	4	4	6	7	9	9	11	11	11	-718	06
07	-734	-4	-4	-4	-3	-3	-2	0	1	2	3	4	5	7	8	10	12	13	13	13	13	14	-716	07
08	-757	-24	-8	-8	-7	-6	-5	-4	-4	-3	-2	-1	0	2	5	9	10	12	13	13	13	13	-717	08
09	-747	-17	-13	-9	-9	-8	-8	-8	-7	-7	-6	-6	-5	-5	-4	-3	-3	-2	-1	2	2	2	-728	09
10	-740	-10	-10	-10	-10	-10	-10	-9	-9	-9	-9	-8	-8	-7	-7	-6	-6	-6	-5	-5	-5	-4	-733	10
11	-738	-9	-9	-9	-9	-8	-8	-7	-7	-7	-6	-6	-6	-6	-5	-5	-5	-4	-4	-3	-3	-2	-732	11
12	-740	-10	-10	-9	-9	-9	-7	-7	-5	-4	-3	-2	-2	-1	0	1	5	7	8	10	10	12	-717	12
13	-758	-26	-26	-25	-24	-21	-15	-7	-5	-5	-4	-4	-3	-3	-2	-1	0	3	6	8	8	8	-720	13
14	-735	-5	-5	-5	-5	-5	-4	-4	-4	-3	-3	-3	-2	-2	-2	-1	-1	-1	-1	0	0	0	-730	14
15																								15
16	-738	-9	-9	-9	-7	-7	-6	-5	-5	-4	-4	-4	-4	-3	-3	-2	-1	-1	-1	0	0	0	-730	16
17	-748	-18	-18	-16	-15	-13	-12	-10	-6	-2	-1	0	0	1	1	3	3	4	4	6	6	6	-724	17
18	-728	2	2	2	2	2	3	4	4	5	5	5	6	8	8	8	9	10	11	11	12	12	-718	18
19	-738	-8	-8	-7	-7	-5	-3	-1	1	2	2	3	4	5	6	9	11	13	15	18	18	18	-711	19
20	-735	-5	-5	-4	-4	-4	-3	-3	-2	-1	0	1	1	2	2	3	3	4	4	5	5	5	-725	20
21	-758	-28	-28	-28	-27	-23	-18	-13	-5	-3	-1	3	4	5	6	7	8	12	13	14	14	14	-715	21
22	-755	-23	-7	-7	-7	-6	-6	-6	-5	-4	-3	-3	-3	-2	0	2	3	4	4	5	5	8	-724	22
23	-748	-15	-13	-8	-7	-7	-6	-5	-3	-3	-3	-2	-2	-2	-1	0	0	0	0	1	1	1	-738	23
24	-735	-5	-5	-5	-4	-4	-4	-3	-2	-1	-1	0	0	1	2	2	3	3	3	4	4	4	-728	24
25	-732	-2	-2	-1	-1	-1	0	0	0	1	1	2	2	3	4	5	5	6	7	7	7	7	-723	25
26	-730	0	0	1	2	2	4	4	5	8	8	8	7	7	8	8	14	18	17	20	21	21	-708	26
27	-761	-31	-31	-31	-31	-30	-26	-14	-6	-3	-2	-1	0	1	3	22	25	27	28	30	30	30	-688	27
28	-731	-1	-1	-1	-1	-1	0	1	2	2	3	3	4	5	5	8	8	8	9	10	10	10	-720	28
29	-734	-4	-4	-3	-3	-3	-2	-1	0	0	1	2	3	3	4	5	8	7	8	8	8	8	-718	29
30	-778	-48	-48	-47	-46	-43	-28	-14	-6	-4	-3	-2	-1	0	1	10	20	24	25	28	30	30	-688	30
31	-737	-7	-7	-6	-6	-6	-5	-5	-4	-3	-2	-2	-1	0	1	2	3	6	8	10	10	10	-720	31
	-778	-47	-41	-24	-18	-11	-8	-8	-4	-3	-1	-730	1	3	4	8	9	12	15	27	28	30	-688	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 9 of 15).

Path: LACY ISLAND to CAPE WARWICK - JUNE 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	6	6	3	7	3	0	1	0	7	10	10	10	9	9	7	8	8	7	8	8	8	7	7	8
02	12	16	26	-31	-141	-135	-123	-117	-110	-111	-119	-114	-49	-84	-16	-38	-5	12	9	13	14	8	-4	-25
03	-103	-159	-81	-88	-91	-215	-238	-228	-212	-173	-58	-138	-47	-12	-1	-4	-38	-31	-36	-138	-170	-135	-128	-123
04	-1	1	9	-1																				
05																								
06	-178	-133	-82	-120	-155	-86	-115	-118	-78	-167	-118	-145	-80	-57	-9	-4	-3	-6	-28	-10	-12	-15	-13	-13
07	-13	-10	-9	-21	-20	-21	-23	-23	-24	-28	-27	-39	-40	-38	-40	-58	-83	-118	-193	-253	-185	-50	-21	-58
08	-112	-184	-140	-188	-101	-190	-173	-231	-151	-109	-101	-83	-107	-65	0	-9	-4	-7	4	11	4	6	0	0
09	-8	0	-4	-3	-8	-5	-9	5	2	0	5	9	8	8	8	7	1	-8	-7	10	9	10	10	10
10	12	15	-85	-56	8	-51	-97	-112	-66	-134	-141	-119	-83	-118	-64	-37	-56	-16	52	-4	7	8	9	3
11	-1	8	3	3	5	4	-2	7	12	4	7	5	4	4	2	2	4	3	2	2	2	1	0	0
12	0	-1	-1	-3	-3	-4	-4	-4	-4	-4	-6	-2	-2	-19	-10	-12	0	-3	-4	5	1	1	2	2
13	-3	-19	-14	-10	-12	-17	-4	-11	-2	-2	-2	-1	0	4	1	-4	-12	-4	-13	-13	3	4	8	11
14	11	12	8	13	7	8	11	8	7	7	7	7	6	-8	-4	-2	1	-4	-8	-13	-2	-1	-2	-3
15	-11	-31	-8	-4	5	4	5	8	5	5	3	3	5	10	10	11	7	8	5	5	4	0	-1	-4
16	-8	-8	0	3	4	4	-2	5	4	0	0	-4	-14	-8	-16	-14	-14	-16	-15	-11	-8	1	4	4
17	4	5	12	8	11	18	14	16	14	13	11	10	7	7	11	10	7	5	4	12	11	10	11	14
18	16	13	14	13	17	16	4	-3	-12	-11	1	-8	-20	-13	-14	-12	-14	-34	-68	-54	-16	7	0	-3
19	-2	-2	-3	-5	-1	3	3	1	3	2	-10	-37	-20	-18	5	0	-15	-7	-18	-41	-80	-23	8	10
20	5	5	5	7	8	10	10	10	11	12	10	13	4	0	2	-1	-4	-1	3	2	2	0	0	-3
21	-5	2	7	3	8	7	10	8	7	3	2	2	4	4	2	1	11	7	8	3	4	4	3	4
22	2	1	-2	-4	-3	0	0	1	1	1	1	5	6	-2	-6	-5	-7	-8	-3	1	0	-1	-1	-5
23	2		-19	-18	-12	4	3	3	3	2	1	3												
24																								
25																								
26	4	5	10	11	11	11	11	11	10	10	12	12	14	14	14	15	14	11	9	14	15	12	14	12
27	18	17	12	11	12	8	5	-23	-12	3	23	4	3	3	-4	8	-19	30	-43	-138	-105	-37	4	-11
28	3	29	18	-7	-8	-2	-23	-13	-25	-23	8	7	-2											
29																								
30																			-5	-5	-3	-1	0	-1
	1	3	0	-2	-1	1	0	0	1	0	2	1	0	-4	-1	-2	-3	-2	-4	1	1	1	2	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-745	-6	-6	-6	-5	-4	-1	1	4	6	7	7	8	8	9	10	10	11	11	11	11	13	-720	01
02	-950	-211	-203	-188	-173	-161	-142	-130	-116	-102	-82	-23	-5	7	12	17	21	27	31	38	38	39	-700	02
03	-1238	-498	-412	-332	-285	-274	-247	-226	-188	-158	-128	-106	-75	-53	-31	-12	-3	9	18	24	24	25	-713	03
04	-780	-41	-41	-41	-40	-38	-23	-18	-8	-3	0	4	8	12	18	23	25	28	29	34	35	35	-704	04
06																								06
08	-1180	-410	-289	-258	-239	-222	-181	-163	-124	-106	-88	-75	-31	-13	-11	-7	-3	-2	-2	0	0	1	-738	08
07	-1128	-376	-330	-299	-288	-272	-206	-168	-88	-48	-39	-33	-24	-22	-20	-13	-10	-6	-4	-1	-1	-1	-738	07
08	-1239	-482	-418	-327	-286	-265	-227	-202	-163	-125	-106	-88	-13	-5	0	5	9	13	16	19	19	19	-720	08
09	-752	-13	-13	-12	-11	-10	-9	-8	-6	-2	1	4	7	8	10	10	11	11	11	12	12	12	-727	09
10	-1058	-317	-288	-248	-222	-191	-154	-134	-99	-85	-61	-48	-11	2	9	13	20	52	55	58	58	58	-679	10
11	-747	-8	-8	-6	-5	-3	-1	0	1	2	3	3	4	4	5	7	10	14	14	15	16	17	-722	11
12	-784	-45	-45	-41	-37	-19	-17	-9	-5	-4	-3	-3	-2	0	1	3	4	8	7	7	8	8	-731	12
13	-783	-24	-24	-23	-22	-20	-18	-15	-13	-11	-7	-3	-2	0	2	6	9	11	12	14	14	14	-725	13
14	-755	-18	-18	-18	-15	-14	-11	-8	-4	-2	1	5	7	8	10	12	13	15	18	18	18	18	-721	14
15	-779	-40	-40	-37	-35	-31	-14	-7	-1	2	4	5	5	6	7	10	11	13	13	14	15	15	-712	15
16	-758	-19	-19	-19	-18	-18	-18	-15	-13	-10	-8	-2	0	2	3	6	7	9	10	11	11	11	-728	16
17	-738	0	0	0	1	2	3	4	7	9	10	11	12	12	14	15	16	17	17	18	18	19	-730	17
18	-812	-73	-73	-73	-72	-70	-54	-37	-18	-13	-10	-8	0	5	13	15	17	18	19	20	20	21	-718	18
19	-803	-83	-83	-83	-82	-81	-48	-35	-21	-13	-6	-3	0	2	3	5	10	11	12	13	13	13	-726	19
20	-745	-8	-8	-5	-5	-4	-1	-2	0	1	3	5	8	9	10	11	13	13	14	15	16	16	-723	20
21	-748	-7	-7	-7	-6	-5	-2	1	2	3	4	4	5	6	7	9	10	11	11	12	13	14	-725	21
22	-749	-10	-10	-10	-9	-9	-9	-7	-5	-3	-2	-1	0	1	2	3	5	6	8	10	10	10	-728	22
23	-763	-24	-24	-24	-24	-23	-20	-16	-12	-3	1	2	3	3	4	5	6	7	7	9	9	9	-730	23
24																								24
25																								25
26	-738	1	1	2	3	3	5	8	9	10	11	12	13	14	15	16	17	18	19	20	20	20	-718	26
27	-838	-187	-180	-171	-161	-144	-88	-44	-25	-10	-1	4	8	11	15	18	25	31	40	46	46	47	-882	27
28	-777	-38	-38	-37	-35	-32	-28	-25	-21	-12	-9	-3	3	7	12	26	30	31	33	34	34	35	-704	28
29																								29
30	-745	-8	-8	-8	-8	-8	-8	-5	-5	-4	-2	-2	-2	-1	-1	0	0	1	1	1	2	2	-737	30
	-1238	-498	-412	-332	-285	-274	-247	-226	-188	-158	-128	-106	-75	-53	-31	-12	-3	9	18	24	24	25	-713	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 10 of 15).

Path: LACY ISLAND to CAPE WARWICK - JULY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-3	-3	-3	-1	0	-1	1	1	1	2	3	1	-4	-3	-8	-12	-8	-3	-13	-15	-170	-204	-198	-85
02	-53	-61	-65	-57	-23	-24	-7	4	14	14	-5													
03																								
04																			11	10	-5	3	-6	-8
05	1	-12	-35	-110	-172	-85	-55	-84	-111	-81	-28	-48	-41	-20	-41	-9	-28	-37	-57	-28	-37	-21	-48	-21
06	1	10	32	4	10	7	-4	-1	-6	9	-78	-109	-147	-113	-72	-55	-90	-66	22	7	13	-10	3	-9
07	49	-38	-28	-19	-14	-12	-37	-124	-62	-8	-8	9	8	8	6	6	6	8	8	8	8	8	6	6
08	6	6	4	6	7	9	11	14	20	19	20	15	3	4	9	1	5	10	20	10	-2	19	7	-3
09	24	0	-5	-26	-40	-82	-186	-152	-137	-39	-3	3	4	18	16	9	9	9	9	12	5	9	9	9
10	11	12	10	8	5	2	1	1	-2	-2	-2	-8	-2	-6	1	16	22	18	18	19	19	16	17	11
11	12	9	8	8	13	23	18	11			12	12	8	2	0	-2	-1	-1	-4	1	3	2	-1	0
12																								
13	23	12	8	3	9	10	10	7	13	24	22	11	9	-19	3	12	10	-12	21	-1	-34	-4	-28	-85
14	-75	17	5	-52	11	-21	-18	-10	-1	-17	-8	-11	-21	-45	-21	1	-88	-96	19	5	14			
15			13	9	12	-8	-22	-26	-16	-8	12	13	2	10	10	9	4	-1	5	3	5	11	3	8
16	4	4	9	11	7	8	8	10	11	10	10	8	8	10	10	11	10	10	11	12	10			
17	18	10	2	-37	-84	-191	-152	-25	9	13	6	-4	11	-11	-11	13	9	16	-25	-80	-121	-22	8	
18	7	-99	-128	-71	-21	-99	-137	-132	-54	-66	-108	-167	-63	-22	10	-92	-101	-80	-43	-21	-49	-25	-28	14
19	-5	-21	-89	-87	-8	-1	13	11	11	11	13	11	11	13	11		11	10	11	11	13	11	8	13
20	11	8	10	13	11	7							-129	-29	-73	-76	-109	-182	-147	-109	-77	-31	-25	3
21	9	19	12	-39	-69	-80	-43	-27	8	5	-35	-86	-14	-52	-4	18	9	0	4	0	17	-3	8	-7
22	-78	-36	25	-68	6	-6	-12	-14	-45	-90	-13	-28	0	6	3	10	10	-3	-3	-4	-6	-12	-9	7
23	2	1	-6	-5	-67	-42	-58	-47	-26	-2	5	10	5	4	-3	-9	-39	-48	-39	-27	-90	-159	-158	-139
24	-201	-79	4	6	15	42	54	39	42	13	-79	-33	20	-95	-136	-37	-20	-22	2	15	15	9	7	8
25	4	3	2	3	3	2	-8	-12	-29	-23	-12	-15	3	8	15	16	16	16	16	13	11	8	14	10
26	12	10	14	17	15	8	12	13	16	10	7	1	4	6	1	-2	-3	0	10	10	-1	12	18	23
27	7	-1	10	24	18	15	12	19	22	19	18	20	17	27	21	19	23	22	22	15	12	11	9	
28												-5	-11	-20	-8	-5	-1	-5	-1	0	-1	5	0	3
29	-27	-23	-9	3	8	8	7	7	-2	-8	-7	-8	-5	-10	-4						-98	-155	-84	-10
30	-15	-27	-18	-8	-3	2	-2	-12	-16	-23	-20	-22	-14	-14	-11	-10	-6	-6	-5	-8	-1	-1	-14	-13
31	-21	-13	-39	-5	-33	-32	-41	-5	-30	-52	-28	3	9	-136	-108	-4	-40	-36	-8	-43	-212	-79	-40	-138
	4	0	1	0	4	0	-2	1	0	-3	-1	-2	1	-4	-1	2	0	-2	5	3	2	2	0	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-1086	-325	-287	-253	-243	-234	-203	-115	-17	-8	-5	-2	-1	0	1	2	3	4	5	6	7	9	-729	01
02	-1132	-390	-313	-242	-203	-172	-92	-73	-59	-33	-25	-20	-9	-4	7	14	15	17	18	19	19	19	-719	02
03																								03
04	-782	-23	-23	-23	-23	-22	-17	-12	-8	-8	-3	-1	2	4	8	12	14	18	18	19	19	19	-718	04
05	-1040	-288	-283	-258	-216	-183	-143	-119	-92	-67	-54	-42	-31	-23	-17	-8	2	7	11	23	24	27	-710	05
06	-1081	-319	-283	-217	-198	-174	-148	-111	-81	-52	-19	-8	1	7	11	19	38	47	57	69	69	70	-688	06
07	-1062	-294	-250	-200	-167	-140	-105	-50	-25	-13	-2	5	6	6	7	9	13	50	61	67	68	68	-670	07
08	-752	-13	-13	-13	-12	-11	-4	0	4	5	6	8	10	13	18	21	22	25	27	30	30	30	-708	08
09	-947	-208	-200	-180	-183	-176	-154	-128	-41	-10	-2	5	8	9	11	16	22	25	27	29	29	30	-708	09
10	-748	-7	-7	-7	-7	-7	-8	-4	-2	1	3	8	11	16	18	20	22	24	26	28	28	28	-711	10
11	-747	-8	-8	-8	-8	-7	-4	-2	-1	1	2	5	8	11	12	17	21	24	26	30	31	31	-708	11
12																								12
13	-1140	-401	-323	-183	-136	-73	-46	-33	-8	-1	4	8	10	12	16	21	24	26	27	28	29	29	-710	13
14	-1220	-481	-355	-234	-131	-123	-105	-89	-39	-25	-17	-12	-6	2	9	18	22	25	27	31	31	32	-707	14
15	-780	-41	-41	-36	-33	-30	-26	-20	-5	1	3	5	6	9	11	13	14	16	17	19	19	20	-719	15
16	-738	1	1	1	1	2	3	4	7	9	9	10	10	11	11	13	14	15	16	17	17	18	-720	16
17	-1087	-348	-310	-272	-253	-231	-178	-135	-68	-36	-18	-8	3	9	12	16	19	23	26	29	29	29	-710	17
18	-1178	-437	-378	-278	-238	-211	-163	-139	-112	-92	-77	-65	-41	-27	-17	2	14	17	20	25	25	28	-713	18
19	-876	-137	-137	-124	-114	-102	-87	-41	-5	7	9	11	11	12	13	14	16	17	17	19	19	19	-720	19
20	-1152	-409	-322	-278	-251	-219	-181	-145	-118	-90	-84	-41	-22	2	9	12	14	15	15	16	16	16	-723	20
21	-1040	-268	-240	-209	-188	-160	-119	-78	-42	-21	-10	-2	3	8	15	19	23	24	28	30	31	31	-707	21
22	-1022	-283	-248	-208	-178	-143	-100	-62	-27	-15	-8	-4	0	3	9	11	12	18	25	33	35	37	-702	22
23	-1122	-375	-335	-268	-249	-193	-165	-145	-69	-49	-35	-23	-9	-1	3	6	9	10	11	12	12	12	-727	23
24	-883	-254	-250	-232	-220	-202	-158	-109	-58	-22	-2	8	9	14	22	42	50	55	56	57	57	58	-681	24
25	-775	-36	-36	-36	-33	-30	-24	-16	-9	2	3	5	8	12	15	17	18	19	20	22	22	22	-717	25
26	-748	-8	-8	-8	-8	-5	-3	-1	1	6	8	10	12	13	15	17	19	23	24	26	26	27	-712	26
27	-746	-7	-7	-7	-5	-3	3	8	12	14	17	18	20	21	22	25	26	28	28	31	31	31	-707	27
28	-788	-27	-27	-26	-25	-23	-20	-18	-11	-8	-5	-3	-1	-1	1	3	5	8	8	7	8	9	-730	28
29	-1022	-282	-270	-237	-202	-180	-133	-85	-25	-14	-8	-6	-3	1	5	7	8	10	11	12	13	12	-728	29
30	-781	-42	-42	-34	-31	-28	-25	-23	-19	-14	-13	-11	-8	-6	-4	-1	1	2	3	4	4	4	-735	30
31	-1185	-417	-342	-278	-247	-223	-188	-144	-89	-62	-42	-34	-25	-15	-3	6	10	15	18	23	23	23	-716	31
	-1220	-388	-284	-232	-202	-187	-123	-78	-31	-14	-5	-739	5	8	12	17	21	25	32	57	63	88	-688	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 11 of 15).

Path: LACY ISLAND to CAPE WARWICK - AUGUST 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-87	-108	-55	-90	-38	-1	-20	-45	-11	-48	3	-16	-58	-34	-12	13	-47	-82	-48	-4	-119	-22	-4	5
02	-4	-26	-28	-37	-23	-13	-7	-7	9	8	5	5	-19	-5	3	-17	-12	-80	-80	-44	-41	-11		
03	14	13	4	-9	-37	-42	-57	-54	-101	-161	-80	-65	-85	-120	-79	-68	-1	-8	-58	-98	-45	-44	-18	4
04	-20	-38	-48	-66	-51	-80	-60	-75	-86	-82	-45	-16	-4	2	8	-2	-14	1	-13	-20	-20	-19	-19	-18
05	-8	-1	-8	-9	-10	-9	-11	-11	4	4	8	2	5	-9	-1	4	3	1	-2	-2	-4	-4	-3	-2
06	-22	-25	-26	-14	-10	-7	-1	4	8	5	4	-1	-2	-5	-7	-7	-3	1	-7	-14	-8	-6	-4	2
07	-2	4	7	5	8	14	-2	-18	-19	-28	-8	-18	-23	-29	-24	-2	-1	-4	1	-10	-13	-20	-98	-114
08	-59	-107	-47	-4	-38	-43	-61	-12	-120	-66	-35	-14	-3	-17	1	-3	-28	-23	-11	-41	-66	-32	5	8
09	4	2	3	-14	-18	-19	-28	-30	-58	-109	-100	-88	-127	-103	-78	-8	-6	-8	-10	-7	-24	-35	-34	8
10	-8	5	5	3	-2	-64	-62	-82	-63	-35	-15	3	-14	-13	-7	-2	-8	-4	-18	-21	-16	2	0	-13
11																								
12	13	10	10	10	8	4	-1	-10	-10	-10	-1	4	5	10										
13																								
14																	11	8	8	5	7	1	1	1
15	-8	-5	-5	-1	8	10	9	12	7	8	7	8	8											
16	-38	-118	-28	-78	-147	-83	-138	-78	-114	-101	-84	-107	-51	-30	-27	-38	-67	-38	-7	10	11	13	30	33
17	-8	8	0	0	-5	-2	-3	-5	-5	5	4	-1	2	5	3	1	0	1	7	-4	2	2	-1	4
18	5	5	4	5	2	5	2	8	8	2	4	4	7	8	7	6	7	12	10	7	2	8	11	11
19	9	9	8	8	8	7	8	2	2	5	5	3	4	7	11	4	-2	3	5	8	9			
20																								
21	-11	-14	-23	-30	-43	-18	-12	-8	9	14	-7	-7	-2	3	-4	-38	-60	-71	-75	-37	8	-12	-18	8
22																								
23	4	7	7	8	7	8	8	8	4	3	8	10	15	12	8	8	1	5	5	5	7	8	5	7
24	8	8	7	7	5	-1	5	2	-3	1	5	2	-3	-3	-6	-3	-1	2	6	10	8	6	11	8
25																								
26	-3	-2	0	3	3	6	6	4	4	8	10	4	5	8	8	11	-1	-1	1	1	14	8	-8	-2
27	4	8	12	8	4	8	-2	-23	-18	-17	-1					-5	4	8	12	11	10	8	4	7
28	-2	-15	-3	14	13	15	9	8	3	8	12	8	8	8	8	12	12	7	8	8	10	3	2	-2
29	-4	5	8	4	5	5	7	11	8	8	8	7	2	-3	-6	1	4	-2	-3	-2	-3	-4	-4	-4
30																								
31																								
	-2	1	1	2	-1	-1	-2	-6	-1	2	4	1	0	-3	0	0	0	1	-1	-2	-1	-1	0	3

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-1167	-424	-352	-280	-247	-211	-158	-116	-82	-58	-43	-35	-25	-12	1	14	20	26	30	35	37	39	-701	01
02	-1180	-447	-381	-247	-184	-147	-83	-68	-40	-27	-19	-15	-9	-4	4	7	8	10	10	12	13	14	-728	02
03	-1000	-258	-243	-208	-195	-184	-157	-118	-94	-67	-56	-46	-37	-28	-2	5	14	18	20	23	23	23	-713	03
04	-853	-113	-113	-104	-101	-98	-87	-85	-84	-50	-35	-20	-18	-14	-6	1	5	10	12	15	15	16	-724	04
05	-781	-21	-21	-20	-15	-12	-12	-11	-9	-6	-3	-2	-1	1	3	5	8	10	11	12	12	12	-728	05
06	-788	-28	-28	-28	-28	-28	-28	-22	-12	-8	-8	-4	-2	0	2	5	8	8	10	12	13	14	-728	06
07	-985	-225	-215	-168	-144	-128	-98	-30	-23	-18	-13	-9	-3	1	4	7	10	14	15	18	18	19	-721	07
08	-974	-233	-218	-189	-155	-144	-118	-77	-55	-42	-32	-23	-18	-10	-2	4	8	10	12	17	17	18	-721	08
09	-884	-144	-144	-142	-138	-128	-118	-108	-84	-40	-32	-22	-12	-7	-1	4	7	11	13	15	16	17	-723	09
10	-847	-107	-107	-102	-98	-91	-75	-62	-31	-18	-13	-9	-5	-1	2	5	8	11	13	16	17	18	-722	10
11																								11
12	-750	-10	-10	-10	-10	-10	-10	-10	-10	-2	0	3	9	9	10	11	13	15	17	20	20	20	-720	12
13																								13
14	-739	1	1	1	1	1	1	1	1	1	2	5	7	8	9	11	13	14	17	21	22	22	-718	14
15	-747	-7	-7	-7	-7	-7	-7	-6	-3	0	5	8	9	9	10	12	13	14	14	17	17	17	-723	15
16	-1188	-448	-332	-244	-225	-202	-157	-133	-103	-79	-60	-43	-33	-15	7	16	27	34	41	45	45	48	-884	16
17	-758	-18	-18	-13	-11	-10	-7	-5	-3	-2	-1	1	2	3	5	7	9	10	11	12	13	14	-726	17
18	-755	-8	-4	-2	-2	-1	1	2	4	4	5	8	7	8	9	11	12	13	13	15	16	16	-724	18
19	-750	-10	-10	-9	-9	-6	-1	1	3	4	5	6	7	8	9	10	11	13	14	15	16	16	-723	19
20																								20
21	-839	-99	-99	-90	-85	-81	-73	-61	-37	-26	-17	-12	-8	-5	2	7	13	17	20	24	25	25	-715	21
22																								22
23	-755	-15	-8	-6	-5	2	2	3	5	5	6	7	7	8	10	12	14	16	16	18	18	21	-718	23
24	-749	-8	-8	-8	-4	-4	-4	-3	1	2	4	5	8	7	8	10	12	15	17	18	18	19	-719	24
25																								25
26	-788	-28	-28	-28	-24	-8	-4	-1	0	1	3	5	6	9	10	11	12	14	15	16	16	16	-724	26
27	-763	-23	-23	-23	-23	-23	-23	-18	-5	2	5	6	7	9	10	12	13	16	17	19	19	19	-720	27
28	-784	-24	-24	-22	-20	-15	-7	-3	3	5	7	9	10	11	12	14	15	16	17	18	18	18	-720	28
29	-748	-8	-8	-7	-7	-6	-5	-5	-3	-2	0	3	4	5	7	9	10	11	12	13	13	13	-736	29
30																								30
31																								31
	-1180	-387	-241	-177	-147	-120	-88	-58	-24	-11	-4	-740	3	5	7	10	13	15	18	35	41	44	-884	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 12 of 15).

Path: LACY ISLAND to CAPE WARWICK - SEPTEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																-2	-5	-3	-3	-3	-5	1	0	-2
02	0	1	1	3	1	1	1	0	1	1	-1	1	1	3	3	3	3	3	3	3	-1	-2		
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																				3	-1	0	-9	-15
12	-10	1	-26	-122	-100	-35	-20	-25	-69	-138	-181	-99	-83	-75	-73	-69	-22	-19	-44	-113	-57	0	-50	-9
13	-7	-79	-101	-155	-87	-51	-54	-150	-180	-187	-115	-114	-118	-59	-4	-7								
14	3	12	-12	-80	-91	-123	-93	-94	-73	-100	-36	-7	-4	-6	-10	-1	-7	-7	-7	-31	-23	-34	-44	-123
15	-138	-72	-27	-80	-80	-93	8	12	16	9	-148	-218	-145	-57	-101	-47	11	-17	-84	-53	-7	-33	-31	-38
16	-58	-71	-31	-70	-81	-26	7	-44	-45	-46	-38	-73	-115	-151	-145	-120	-44	-13	-17	-17	-15	-38	-52	-50
17	3	8	5	3	-3	-3	-6	0	8	8	9	8	-42	-41	-20	-38	-53	-23	-33	-45	-29	-34	-18	-74
18	-76	-77	-81	-138	-86	-63	-43	-52	-54	-45	-27	-4	2	36	16	-24	-22	-68	-61	-37	-21	-18	-2	39
19	-89	-88	-75	-98	-83	-72	-81	-128	-17	-22	-22	-49	-85	-83	-42	-10	-8	-28	-145	-20	0	-5	-14	-3
20	3	-7	-28	-5	3	-14	-8	-9	-4	-2	-10	-14	-13	-15	-17	-18	-8	-6	-7	-8				
21																								
22																								
23	7	5	11	7	3	11	7	3	11	3	3	4	-3	-8	-8	3	-9	-8	-15	-19	-20	0	6	3
24	3	3	11	7	7	6	11	12	13	16	14	8	3	3	3	3	1	4	0	3	0	3	3	0
25	-1	1	3	3	3	4	3	-5	-5	5	3	4	2	-3	6	4	8	15	8	13	11	10	13	14
26	6	10	10	8	8	7	5	-11	-15	-8	1	0	-3	-1	-6	-8	-4	-2	2	1	2	3	4	4
27	10	8	11	8	8	11	10	12	12	8	7	4	5	4	-1	2	-3	1	5	3	0	-2	-4	1
28	10	10	13	12	10	8	10	8	8	7	12	13	11	10	7									
29	13	11	11	13	18	14	10	13	11	5	4	-5	-50	-27	0	8	8	4	3	3	2	3	2	1
30	2	2	2	1	2	1	0	3	6	7	7	8	7	6	8									
	2	3	2	2	2	2	2	-1	1	2	2	0	-5	-6	-4	-2	-4	-4	-4	-6	0	2	-1	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.98	MAX	DAY
01	-749	-16	-16	-16	-14	-11	-8	-7	-5	-4	-3	-2	-2	-1	0	2	3	4	5	5	6	6	-728	01
02	-737	-4	-4	-4	-4	-3	-2	-1	0	1	1	1	2	3	3	5	8	8	8	8	8	8	-727	02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11	-755	-22	-22	-22	-22	-22	-20	-18	-15	-11	-6	-3	0	3	6	10	11	12	13	13	13	13	-720	11
12	-1180	-447	-328	-294	-289	-218	-184	-136	-97	-78	-71	-52	-32	-21	-13	-4	4	12	14	23	24	25	-708	12
13	-1144	-411	-328	-282	-252	-228	-198	-177	-147	-121	-109	-95	-71	-51	-33	-6	0	6	10	13	13	13	-720	13
14	-1145	-381	-240	-190	-174	-155	-125	-108	-86	-64	-37	-24	-13	-7	-2	3	9	15	20	26	27	27	-706	14
15	-1215	-482	-370	-313	-280	-247	-210	-170	-104	-74	-58	-44	-33	-14	1	14	20	22	24	26	27	27	-705	15
16	-1002	-286	-245	-219	-200	-183	-180	-141	-90	-71	-60	-44	-42	-30	-24	-13	-5	9	12	16	19	20	-712	16
17	-850	-117	-114	-102	-98	-86	-74	-80	-43	-28	-16	-7	1	2	8	11	13	18	20	24	27	28	-704	17
18	-1189	-458	-323	-237	-206	-186	-104	-85	-70	-55	-45	-36	-28	-14	2	22	37	43	48	55	57	59	-672	18
19	-1056	-313	-257	-185	-174	-163	-144	-124	-85	-76	-57	-44	-26	-17	-8	-2	0	6	7	12	13	14	-719	19
20	-777	-44	-44	-42	-39	-33	-28	-21	-18	-13	-10	-9	-7	-4	-3	5	8	12	14	20	21	23	-709	20
21																								21
22																								22
23	-758	-26	-25	-25	-25	-25	-21	-15	-9	-5	-2	1	3	5	7	9	10	11	11	17	18	19	-714	23
24	-735	-2	-2	-2	-2	-2	-2	-1	0	1	2	3	6	10	11	14	14	17	17	18	18	18	-715	24
25	-743	-10	-10	-10	-10	-8	-5	-2	2	3	3	4	6	8	11	14	15	17	18	18	18	18	-714	25
26	-752	-18	-18	-18	-17	-16	-14	-9	-4	-2	0	2	3	5	7	10	10	12	12	12	12	12	-720	26
27	-738	-6	-6	-6	-6	-6	-5	-3	0	2	4	5	8	10	10	12	12	13	13	15	15	15	-718	27
28	-730	3	3	4	5	6	7	8	9	10	10	11	11	12	13	13	14	14	14	15	16	16	-717	28
29	-784	-61	-61	-56	-54	-51	-32	-16	3	3	3	6	9	12	13	14	15	16	18	19	19	19	-714	29
30	-734	-1	-1	-1	-1	-1	0	0	1	2	2	3	5	6	7	7	8	8	8	8	8	8	-724	30
	-1215	-372	-283	-221	-181	-162	-118	-83	-44	-18	-6	-733	2	3	8	11	13	17	21	44	47	54	-672	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 13 of 15).

Path: LACY ISLAND to CAPE WARWICK - OCTOBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02	-4	-3	-3	-2	-2	-2	-3	-2	-2	-2	-2	-2	-2	-1	-1	-2	-1	-1	0	0	0	1	2	2
03	2	1	1	1	1	0	0	-2	0	1	-1	-1	-1	0	0	-1	-1	-2	-2	-1	-1	-2	-1	-1
04	0	-1	-1	-2	-2	-2	-1	-1	-2	-1	-1	-1	-1	-1	-2	-2	0	0	-2	1	2	3	1	3
05	0	-1	-1	-1	3	3	-1	3	4	2	-1	-1	-1	-1	1	3	4	4	4	4	4	4	3	3
06	2	0	-1	-2	-3	0	2	3	4	4	3	3	3	3	2	4	4	5	3	1	-2	1	2	3
07	3	3	2	2	0	1	1	3	5	2	4	4	4	4	5	4	4							
08																								
09																								
10	-6	-2	-3	-2	-2	-3	-3	-4	-3	-3	-2	-2	-2	-1	0	-1	-3	-4	-1	0	-1	-2	-4	-4
11	-3	-3	-4	-4	-5	-5	-5	-5	-6	-5	-5	-5	-5	-4	-4	-4	-5	-5	-3	-4	-3	-1	-2	-3
12	-3	-2	-4	-4	-4	-3	-4	-6	-5	-3	-2	-2	-3	-4	-7	-5	-5	-6	-5	-4	-2	-1	0	-1
13	-1	-2	-3	-3	-4	-4	-2	-2	-1	0	-1	-2	-1	0	-3	-4	-3	-2	-3	-2	-1	1	-1	-2
14	-2	-1	0	1	0	0	0	-1	-1	-1	-1	1	1	1	1	1	-3	-3	-2	-1	0	0	1	3
15	3	3	3	2	1	1	3	4	5	5	6	6	6	6	6	6	4	3	5	3	-1	3	3	2
16	3	2	-1	1	2	6	5	6	6	-13	-1	1	0	0	1	0	1	3	1	2	2	3	3	4
17	-3	-4	-3	-3	-3	-4	-3	-2	-2	0	0	1	0	1	0	1	1	3	0	-1	-1	-1	-2	1
18	1	2	3	4	1	2	2	6	2	7	6	-1	1	1	2	0	2	3	2	0	1	2	1	1
19	2	2	2	2	-2	1	2	2	1	2	1	1	-1	-1	-1	-1	-2	-1	-1	0	1	2	2	1
20	3	2	2	1	2	0	-1	-1	0	0	3	3	4	3	3	2	1	1	1	1	2	2	1	0
21	0	0	0	-1	-1	-1	-2	-3	-2	-2	-2	-2	-3	-2	-2	-2	-5	-5	-5	-5	-6	-4	-5	-3
22																								
23																								
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
	0	0	-1	-1	-1	0	-1	-1	-1	0	-1	0	0	0	0	0	-1	-1	-1	0	0	1	1	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02	-737	-7	-8	-5	-5	-4	-4	-3	-3	-2	-2	-2	-1	-1	0	1	2	3	3	5	5	5	-724	02
03	-734	-4	-4	-3	-3	-3	-3	-2	-2	-1	-1	0	0	1	1	2	2	2	3	3	3	4	-726	03
04	-738	-8	-8	-5	-5	-4	-3	-2	-2	-2	-1	-1	0	0	1	3	4	4	5	6	6	6	-724	04
05	-784	-34	-33	-26	-18	-8	-2	-2	-1	0	1	3	3	4	4	5	6	10	14	18	19	20	-708	05
06	-735	-5	-5	-4	-4	-4	-3	-2	0	1	2	3	3	3	4	4	5	5	6	7	8	8	-720	06
07	-733	-3	-3	-3	-2	-1	0	1	2	3	3	3	4	4	4	5	5	6	7	10	10	10	-720	07
08																								08
09																								09
10	-737	-7	-7	-7	-7	-8	-5	-5	-3	-3	-2	-2	-2	-1	-1	0	1	1	1	2	2	2	-727	10
11	-739	-8	-8	-7	-7	-7	-6	-6	-5	-5	-5	-4	-4	-4	-3	-2	-2	-1	0	1	1	2	-728	11
12	-737	-7	-7	-7	-7	-7	-8	-6	-5	-4	-4	-3	-3	-2	-2	-1	0	0	1	2	2	2	-728	12
13	-738	-8	-8	-7	-6	-5	-5	-4	-3	-3	-2	-2	-1	-1	0	0	1	2	3	5	5	6	-724	13
14	-734	-4	-4	-4	-4	-4	-3	-2	-2	-1	-1	0	0	1	1	2	3	4	5	5	5	5	-725	14
15	-738	-8	-8	-5	-3	-1	1	1	2	3	3	4	5	5	6	6	7	7	7	8	9	9	-721	15
16	-747	-17	-17	-17	-16	-14	-3	-1	0	1	1	2	2	3	4	6	7	8	8	10	10	10	-716	16
17	-737	-7	-7	-6	-6	-5	-4	-3	-3	-2	-2	-1	0	1	1	2	2	3	4	5	5	6	-723	17
18	-734	-4	-4	-3	-3	-2	-1	0	1	1	2	2	2	3	4	6	7	8	9	10	11	11	-719	18
19	-734	-4	-3	-3	-3	-2	-2	-2	-1	0	0	1	1	2	2	3	3	3	4	5	5	5	-724	19
20	-738	-8	-5	-3	-3	-3	-2	-1	0	1	1	2	2	3	3	4	4	5	5	7	7	7	-722	20
21	-737	-7	-7	-7	-7	-7	-6	-6	-5	-4	-3	-2	-2	-1	-1	0	0	1	1	2	2	2	-728	21
22																								22
23																								23
24																								24
25																								25
26																								26
27																								27
28																								28
29																								29
30																								30
31																								31
	-784	-32	-18	-7	-8	-8	-5	-4	-2	-2	-1	-730	1	2	3	4	5	6	7	11	15	18	-708	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 14 of 15).

Path: LACY ISLAND to CAPE WARWICK - NOVEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	2	3	2	3	1	2	2	3	3	2	2	3	3	3	3	3	3	3	2	2	2	3	3	3
02	4	4	4	4	4	4	5	5	5	5	4	4	4	4	4	4	4	5	4	5	5	5	4	4
03	4	5	5	5	4	4	4	4	3	3	2	3	3	5	4	4	4	3	2	1	0	0	-1	-1
04	-1	-2	-3	-4	-4	-7	-10	-10	-11	-11	-7	-6	-4	-5	-5	-3	-4	-5	-3	1	2	4	5	-11
05	-31	-46	-27	-25	-25	5	8	-8	-12	-7	4	5	0	1	0	2	2	1	0	-1	-1	-2	-2	-1
06	0	1	2	4	4	3	2	-3	-22	-11	-7	-5	-4	-4	-3	-3	-1	-3	-1	-2	3	5	6	6
07																			-2	-2	-1	-2	-4	-4
08	-3	-3	-3	-2	-1	-1	-1	-1	-1	0	1	0	-1	0	0	0	-2	0	-1	-3	-5	-8	-5	0
09	-5	0	-2	-3	-1	-4	-3	-1	-5	-13	-11	-5	-3	-1	-22	-6	-24	1	-3	-3	-2	-3	-2	-1
10	-1	0	2	2	2	0	0	-1	-2	-3	-3	-4	-3	-4	-3	-3	-4	-4	-4	-4	-3	-3	-2	-1
11	-1	-1	-1	-2	-1	-1	-2	-1	-1	0	-1	-1	0	2	2	2	2	2	2	2	2	3	3	3
12	3	3	3	3	2	3	3	3	4	4	4	3	4	2	2	2	7	5	4	4	4	4	3	4
13	4	3	4	4	3	3	3	4	4	4	3	3	3	3	2	1	1	1	0	0	-1	-1	0	1
14	1	2	2	2	2	2	2	1	2	3	2	2	1	1	1	1	1	0	1	1	0	0	1	2
15	1	0	1	0	0	0	0	0	1	0	0	0	1	2	2	2	2	2	2	2	2	2	1	1
16	2	2	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	1	0	1	0	0	-1	0
17	1	0	-1	-2	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	1	1	2	3	3	1	-1	1	1
18	1	-1	-2	-3	-7	-7	-2	0	-1	-2	-3	-4	-3	-4	-4	-6	-7	-8	0	1	2	2	0	-2
19	-4	-5	-6	-6	-6	-5	-2	-2	-1	-2	-3	-4	-5	-6	-6	-7	-8	-8	-11	-11	-11	-11	-10	-9
20	-8	-7	-7	-7	-6	-6	-5	-6	-6	-6	-6	-6	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-6	-6
21	-5	-4	-6	-7	-6	-6	-5	-5	-6	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-4	-4	-5	-5
22	-5	-5	-6	-7	-8	-7	-7	-7	-8	-8	-6	-5	-4	-4	-4	-6	-7	-7	-7	2	5	5	4	-3
23	-5	-6	-7	-9	-9	-10	-6	-5	-4	-4	-3	-4	-2	-4										
24																								
25																								
26																								
27																								
28																								
29																								
30																								
	0	0	-1	-1	-1	-1	0	-1	-1	-2	-1	-1	-1	0	0	0	0	0	0	0	1	0	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-739	-9	-9	-8	-7	-6	1	2	2	2	3	3	3	3	3	4	4	5	5	5	6	6	-723	01
02	-727	3	3	3	3	3	3	3	4	4	4	4	5	5	5	5	5	6	6	6	6	6	-723	02
03	-732	-2	-2	-2	-2	-2	-1	-1	1	2	3	4	4	4	5	5	6	6	6	7	7	7	-720	03
04	-760	-30	-30	-23	-21	-18	-13	-11	-8	-6	-5	-4	-3	-2	-1	2	4	6	7	8	9	9	-721	04
05	-790	-60	-59	-56	-53	-50	-42	-31	-21	-6	-2	-1	0	1	2	5	7	9	11	15	15	16	-713	05
06	-770	-40	-36	-31	-27	-23	-12	-7	-4	-3	-2	-1	1	2	4	6	7	7	8	11	11	11	-718	06
07	-738	-8	-7	-6	-6	-6	-5	-4	-4	-3	-3	-2	-2	-2	-1	0	0	1	1	2	2	2	-727	07
08	-743	-13	-13	-11	-11	-9	-6	-4	-3	-2	-2	-1	-1	0	0	1	1	2	2	4	4	5	-725	08
09	-845	-115	-115	-98	-84	-52	-23	-15	-7	-5	-4	-3	-2	-2	-1	0	1	4	6	10	10	11	-709	09
10	-734	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-2	-2	-1	0	2	2	3	3	3	3	5	-725	10
11	-742	-12	-8	-3	-3	-3	-2	-2	-1	-1	0	1	1	2	2	3	3	4	4	5	5	6	-724	11
12	-729	1	1	1	1	1	1	2	3	3	3	4	4	4	5	5	6	7	8	10	10	10	-719	12
13	-731	-1	-1	-1	-1	-1	-1	0	0	1	2	3	3	4	4	4	5	5	5	6	6	6	-722	13
14	-731	-1	-1	0	0	0	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	-725	14
15	-732	-2	-2	-1	-1	-1	-1	0	0	0	1	1	1	2	2	3	3	3	3	4	4	4	-724	15
16	-731	-1	-1	-1	-1	-1	-1	0	0	0	1	1	1	2	2	2	3	4	4	4	4	4	-725	16
17	-735	-5	-4	-3	-3	-3	-3	-2	-2	-1	-1	-1	0	1	1	2	3	3	4	5	5	6	-724	17
18	-741	-11	-11	-11	-10	-10	-9	-7	-5	-4	-3	-2	-2	-1	1	2	2	3	3	5	6	6	-724	18
19	-743	-13	-13	-13	-12	-12	-11	-11	-9	-8	-6	-6	-5	-5	-3	-2	-1	0	2	5	5	5	-724	19
20	-738	-8	-8	-8	-8	-8	-7	-7	-6	-8	-6	-5	-5	-5	-5	-4	-4	-4	-4	-3	-3	-3	-731	20
21	-737	-7	-7	-7	-7	-7	-7	-6	-6	-6	-5	-5	-5	-4	-4	-4	-3	-3	-2	-2	-1	0	-730	21
22	-741	-11	-11	-10	-9	-8	-8	-8	-7	-7	-6	-8	-5	-4	-3	4	8	6	7	7	8	8	-715	22
23	-741	-11	-11	-11	-11	-11	-10	-9	-8	-7	-6	-5	-5	-4	-3	-2	-1	0	1	2	2	2	-728	23
24																								24
25																								25
26																								26
27																								27
28																								28
29																								29
30																								30
	-845	-114	-58	-33	-25	-14	-8	-7	-5	-3	-2	-730	1	2	3	4	5	6	7	10	11	14	-709	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C1 Summary of monthly propagation statistics (Page 15 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - SEPTEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																				-1	4	19	11	27
13	38	43	33	18	10	6	17	-12	-3	-14	-11	-12	-5	-1	1	1	0	0	-3	-1	-8	-28	-30	-8
14	-25	-23	-20	-15	-13	-11	-7	-5	-7	-3	-6	-11	-11	-12	-10	-7	-7	-7	-10	-9	-8	1	5	6
15	20	89	50	38	27	14	1	-11	-2	-2	-4	-8	-12	-15	-20	-14	-10	-12	-9	-8	-8	-3	-7	-14
16	-17	-22	-21	-19	-12	-17	-21	-26	-25	-24	-26	-22	-27	-23	-21	-17	-20	-11	-1	-2	2	3	3	-5
17	-11	-8	-5	-1	1	14	20	32	22	10	5	7	0	-1	1	5	9	4	1	0	-5	8	8	5
18	7	13	15	18	8	2	-2	-6	-13	-15	-11	-2	-7	-11	-10	-10	-7	-8	-1	-2	-4	-5	-6	-5
19	-4	-1	-7	-23	-38	-40	-35	-33	5	5	-6	-8	-10	-10	-1	-5	-8	-3	1	3	-6	-9	-3	1
20	2	4	5	5	6	7	9	13	15	12	9	3	1	6	1	8	14	12	12	12	13	11	5	3
21	5	10	11	10	10	11	11	8	4	0	-2	-3	-3	-4	-4	-5	0	3	0	-4	-14	-93	-98	-94
22	-43	-13	9	-1	-3	2	7	5	5	4	11	11	7	-6	-14	-6	8	9	1	9	7	-4	-2	-12
23	-7	-8	-7	1	5	5	10	3	-5	2	3	-8	-5	-17	-5	8	6	-22	-28	-104	-102	-39	-17	-34
24	-21	-26	-33	-49	-39	-8																		
25																						-1	-4	-23
26	-17	2	4	7	-9	-39	-119	-65	-73	-72	-63	-62	-47	-56	-14	29	42	78	36	2	5	22	25	23
27	27	33	30	22	36	41	58	47	31	-13	-55	-2	-9	14	14	8	3	2	2	2	5	5	1	0
28	0	2	8	13	-7	-12	11	21	35	32	20	32	20	26	6	21	54	52	36	41	22	17	10	26
29	25	17	14	14	19	35	30	32	33	35	24	52	28	19	14	-91	-88	-54	-33	-48	-105	-138		
30																								
	-1	4	7	7	4	5	10	3	2	1	-3	-3	-3	-6	-3	-3	1	0	1	0	-2	1	-1	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12	-705	-25	-25	-22	-18	-13	-5	-1	2	4	6	9	12	16	22	29	39	44	47	49	49	49	-631	12
13	-731	-50	-44	-38	-35	-32	-28	-16	-12	-8	-3	0	1	4	15	35	41	44	46	48	48	53	-621	13
14	-738	-58	-53	-41	-29	-28	-23	-19	-12	-11	-10	-8	-7	-6	-4	1	5	7	8	12	12	14	-685	14
15	-703	-23	-23	-22	-21	-20	-18	-14	-12	-10	-8	-7	-3	0	18	39	58	74	80	85	85	85	-585	15
16	-710	-30	-30	-28	-29	-28	-27	-28	-24	-22	-20	-18	-18	-12	-3	2	5	9	11	13	14	15	-685	16
17	-697	-17	-17	-15	-13	-11	-9	-5	-1	1	2	4	6	9	13	21	27	32	34	38	39	39	-641	17
18	-689	-19	-19	-17	-16	-15	-14	-13	-10	-7	-6	-4	-2	0	6	12	17	20	21	24	24	24	-658	18
19	-728	-49	-48	-46	-45	-44	-41	-35	-19	-9	-7	-5	-4	-2	1	4	6	9	11	16	16	17	-663	19
20	-681	-1	-1	-1	0	0	1	3	4	6	6	10	11	12	14	15	15	16	16	18	18	21	-659	20
21	-807	-127	-126	-123	-118	-110	-99	-81	-5	-3	-2	0	3	7	9	12	12	13	13	14	15	16	-660	21
22	-749	-69	-68	-61	-55	-44	-19	-14	-5	-2	1	4	6	9	10	13	14	16	16	19	19	20	-680	22
23	-853	-173	-168	-159	-150	-132	-91	-45	-28	-15	-9	-6	-2	1	5	9	12	15	16	20	20	20	-660	23
24	-837	-157	-157	-152	-148	-135	-87	-68	-52	-44	-36	-29	-27	-24	-21	-18	-15	-10	-8	-6	-6	-5	-684	24
25	-713	-33	-33	-33	-33	-33	-31	-28	-23	-15	-7	-6	-4	-3	-1	1	2	2	3	5	5	5	-675	25
26	-831	-151	-151	-144	-132	-122	-95	-74	-63	-53	-19	-4	5	14	25	40	57	81	85	86	86	86	-594	26
27	-860	-177	-166	-138	-121	-82	-53	-10	2	3	6	10	20	29	34	42	54	67	79	89	89	90	-590	27
28	-711	-31	-29	-28	-21	-16	-8	-2	4	10	14	19	28	34	38	47	80	84	85	87	87	87	-593	28
29	-859	-175	-162	-149	-143	-136	-119	-91	-47	-11	15	19	24	30	35	39	43	56	63	85	86	87	-593	29
30																								30
	-860	-187	-151	-128	-110	-88	-53	-25	-13	-8	-4	-800	4	8	13	29	38	59	82	88	89	90	-590	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 1 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - OCTOBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01													7	17	14	5	0	-3	-1	0	6	8	10	8
02	4	9	7	11	11	8	10	15	15	18	17	8	6	-4	-19	-27	-5	13	13	11	14	-4	1	-1
03	0	-3	0	6	10	4	6	6	9	3	-5	-7	-4	-5	3	3	3	2	2	2	-3	-6	-5	-2
04	0	1	1	2	3	4	6	1	-1	-6	-6	-6	5	1	1	5	0	0	1	-1	0	-2	-2	-3
05	-3	-1	0	2	3	3	2	-1	-1	-3	-4	-5	-8	-4	-8	-5	-3	-3	-1	-1	-3	-3	-8	-7
06	-7	-7	-6	-5	-3	-1	-1	-1	-1	-1	-2	-1	1	10	8	0	0	1	3	7	9	3	0	-2
07	-5	-6	-4	-4	-3	-2	-1	0	0	-1	-3	-5	-5	-5	-6	-8	-5	-3	-2	-3	-3	-4	-5	-5
08	-5	-2	-4	-3	-1	-1	2	2	2	2	0	-1	-4	-5	-5	-5	-4	-3	0	1	0	-2	-3	-4
09	-8	-8	-8	-7	-7	-4	-2	-2	0	-2	-2	-2	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1
10	-3	-3	-3	-2	-2	-2	-1	-1	0	1	2	1	1	1	-1	-2	-1	-1	1	2	4	2	1	2
11	2	1	1	1	2	1	4	5	9	9	11	11	2	2	6	5	5	9	5	6	7	9	9	9
12																								
13	2	1	-1	2	1	8	8	10	4	8	8	7	5	1	4	-1	-3	-4	-6	-8	-9	-8	-2	-3
14	-3	-3	-1	-1	-1	3	-1	-1	-1	-3	-3	-3	-1	-1	-1	-1	-1	-3	-3	-3	-4	-3	-3	-3
15	-1	-1	-1	0	1	3	3	1	-1	-1	-1	-1	0	1	3	-1	-1	-1	0	0	-3	-3	-1	-1
16	-1	-1	-1	1	3	1	3	1	-1	-1	0	1	1	2	4	6	6	5	8	4	1	1	-1	0
17	2	2	4	5	5	5	4	3	3	3	1	1	1	0	-4	-4	-3	-1	-1	-1	-3	-1	-1	-1
18	-1	-1	-3	-5	-3	-1	0	4	4	4	1	-1	-1	-3	-4	-3	-1	-66	-1	-1	0	-5	-5	-3
19	-1	-1	-1	-3	-1	-1	-1	-1	-1	-4	-5	-4	-1	-1	1	4	[illegible]	1	-1	-1	-1	-3	-3	-1
20	-1	-1	-1	1	-1	-1	-1	-3	-3	-3	-6	-6	-4											
21													-8	-5	-4	-1	-1	-1	-2	0	0	0	0	-1
22	-1	-3	-5	-1	-1	1	4	4	4	1	-1	-1	-3	-4	-1	-1	-1	-1	1	-1	-1	-1	-3	-3
23	-3	-5	-5	-3	-3	-3	-3	-3	-3	-3	-1	1	5	-1	0	7	9	1	-5	-3	-3	-3	-3	-3
24	-3	-3	-1	-1	-1	-1	2	1	1	3	1	3	3	3	1	1	1	1	1	1	1	1	1	1
25	1	3	3	3	4	2	3	3	3	0	1	8	9	8	8	-1	-4	7	5					
26																								
27																								
28																								
29	5	5	5	5	4	2	2	2	2	3	3	0	0	1	4	5	7	5	5	4	3	3	3	3
30	1	1	1	1	1	-1	-5	-6	-6	-6	-6	-6	-4	-3	5	5	5	5	5	8	10	8	0	-3
31	8	8	8	8	8	8	8	8	6	5	3	3	3	3	0	2	4	1	4	4	4	5	8	8
	-1	-1	-1	2	2	2	2	2	2	1	0	-1	1	1	2	1	0	0	1	1	0	-1	-1	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-688	-6	-6	-6	-6	-5	-3	-2	0	1	5	7	8	10	12	15	19	23	25	29	30	30	-652	01
02	-728	-46	-44	-41	-35	-31	-21	-9	-1	3	7	9	10	13	15	17	19	22	24	27	29	30	-652	02
03	-691	-9	-9	-9	-8	-8	-6	-5	-4	-2	0	1	2	4	5	8	11	13	13	15	16	17	-665	03
04	-692	-10	-10	-9	-8	-7	-6	-5	-2	0	0	1	1	3	4	5	7	9	10	13	14	14	-688	04
05	-691	-9	-8	-7	-7	-7	-6	-6	-5	-3	-2	-2	-1	0	1	3	4	4	5	7	7	7	-675	05
06	-692	-10	-9	-9	-9	-8	-7	-6	-3	-1	-1	0	0	2	4	7	10	12	13	15	16	18	-664	06
07	-700	-18	-9	-7	-6	-6	-6	-6	-5	-5	-4	-3	-2	-2	-1	0	0	0	1	3	3	3	-679	07
08	-688	-8	-8	-8	-8	-8	-8	-5	-4	-3	-2	-2	-1	0	1	3	4	5	6	7	7	7	-675	08
09	-693	-11	-11	-9	-7	-7	-6	-6	-4	-2	-2	-1	-1	-1	0	0	2	3	3	4	4	4	-678	09
10	-687	-5	-5	-4	-3	-3	-3	-2	-2	-1	-1	0	0	1	2	3	4	6	7	9	10	11	-671	10
11	-682	0	0	0	0	0	1	2	3	3	5	6	7	8	9	11	12	13	14	16	17	18	-664	11
12																								12
13	-693	-11	-11	-11	-11	-11	-10	-8	-4	-1	0	1	3	5	7	9	12	13	13	13	15	16	-685	13
14	-688	-8	-8	-8	-8	-5	-5	-5	-4	-4	-3	-3	-2	-2	-2	-1	2	4	4	4	4	4	-678	14
15	-687	-5	-5	-5	-5	-5	-5	-4	-3	-2	-2	-1	0	0	1	2	3	4	4	8	8	8	-674	15
16	-683	-1	-1	-1	-1	-1	-1	-1	-1	0	1	2	3	3	4	6	8	9	9	13	13	13	-669	16
17	-688	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	0	1	3	4	5	7	7	8	8	8	8	-670	17
18	-813	-131	-129	-123	-115	-99	-52	-5	-4	-4	-3	-2	-2	-1	0	2	3	4	4	4	4	4	-678	18
19	-688	-6	-6	-6	-6	-6	-5	-5	-4	-4	-3	-2	-2	-1	3	4	4	4	4	4	4	4	-678	19
20	-688	-8	-8	-8	-8	-8	-8	-8	-5	-4	-4	-3	-2	-2	-1	0	2	3	4	4	4	4	-678	20
21	-688	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	-1	-1	0	0	0	2	4	5	5	5	-677	21
22	-687	-5	-5	-5	-5	-5	-5	-5	-4	-3	-3	-2	-2	-1	0	2	3	4	4	4	4	4	-678	22
23	-687	-5	-5	-5	-5	-5	-5	-5	-4	-4	-3	-3	-2	-1	1	5	9	12	13	13	13	16	-685	23
24	-698	-16	-14	-10	-9	-6	-4	-1	0	1	1	2	3	5	7	9	10	11	11	14	15	15	-667	24
25																								25
26																								26
27																								27
28	-679	3	3	3	3	3	3	3	3	3	3	4	5	5	6	7	7	7	8	11	11	13	-687	28
29	-705	-20	-13	-9	-7	-4	-1	0	2	2	3	3	4	5	6	8	11	12	12	13	14	15	-667	29
30	-693	-11	-11	-11	-11	-11	-10	-9	-8	-4	-1	1	3	3	4	5	7	8	8	11	12	12	-670	30
31	-693	-11	-11	-11	-11	-11	-8	-1	1	3	4	5	6	7	9	11	12	13	14	16	16	16	-666	31
	-813	-43	-29	-11	-7	-7	-8	-4	-2	-1	-1	-682	2	3	4	8	10	13	15	23	24	28	-652	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 2 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - NOVEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02	-7	-5	-2	0	1	0	-1	-1	-1	-1	-3	-4	-4	-3	-3	-3	-4	-3	-1	-2	-3	-5	-6	-8
03	-8	-8	-6	-5	-2	-2	-2	-3	-5	-7	-9	-9	-9	-8	-6	-6	-4	-5	-4	-2	-3	-3	-7	-8
04	-5	-7	-6	-6	-5	-2	-2	-2	0	-5	-8	-8	-8	-9	-6	-3	-2	-1	-5	-3	0	-6	-5	-8
05	-8	-9	-8	-4	-3	-2	-3	-3	-3	-5	-7	-10	-9	-8	-10	-4	-6	-7	-7	-5	0	1	-2	-2
06	-5	-1	0	0	-4	-6	-1	1	0	2	0	-2	-3	-5	-6	-6	-7	-5	1	3	-2	-4	-7	-7
07	-8	-9	-8	-7	-8	-3	0	2	3	4	3	7	8	7	8	9	8	7	8	4	0	3	4	6
08	4	1	-3	-5	-5	-5	-7	-4	-5	-4	-4	-4	-4	-3	-4	-3	-3	-3	-1	0	1	2	3	2
09	0	-3	-5	-7	-10	-10	-9	-8	-7	-6	-3	-1	4	5	2	2	0	-1	-3	-6	-8	-7	-7	-5
10	-3	-1	-1	-1	-1	-1	0	1	1	1	2	2	1	-2	-1	2	-2	-6	-10	-10	-12	-12	-13	-9
11	-7	-7	-8	-8	-7	-8	-8	-8	-8	-8	-8	-7	-6	-8	-7	-7	-8	-8	-9	-10	-11	-11	-11	-13
12	-15	-13	-12	-11	-11	-12	-13	-13	-13	-11	-9	-7	-7	-7	-7	-6	-6	-5	-8	-7	-8	-7	-6	-8
13	-8	-7	-5	-2	-2	-2	0	-2	-1	0	1	-6	-4	-1	-1	-1	-1	1	-2	-6	-7	-8	-6	-8
14	-1	2	2	0	2	6	4	1	1	1	6	4	3	5	7	13	16	-2	-1	0	-2	-4	-4	-2
15	-2	-3	0	1	0	-2	1	1	-4	-4	-2	-2	0	0					-4	-3	-4	-2	-3	-4
16	-3	-1	1	2	2	0	[illegible]	1	0	-1	-2	-3	-2	1	6	0	2	3	3	2	2	3	1	-1
17	-3	-2	-1	0	3	4	[illegible]	[illegible]	2	2	2	1	1	2	0	0	-1	-2	-3	-4	-5	-5	-4	-4
18	-3	-2	-1	2	4	3	[illegible]	[illegible]	10	9	7	2	2	4	6	4	4	5	8	3	1	-2	-4	-2
19	-2	-3	-3	2	1	-2	1	0	-2	-5	-4	-1	-2	-4	-3	-3	-2	-1	-4	-4	-5	-2	-3	-5
20	-5	-1	-1	-1	-2	0	1	1	0	-1	-1	1												
21														11	8	17	15	24	18	9	10	14	14	22
22	24	22	7	5	7	0	7	2	7	11	12	14	7	3	5	-1	2	4	4	5	4	2	2	2
23	1	1	0	1	1	1	3	3	4	4	4	4	5	5	3	1	2	1	3	4	5	4	5	5
24	5	3	2	3	2	2	3	4	3	4	6	4	4	3	3	6	10	6	6	6	6	5	5	7
25	8	8	8	8	7	8	13	13	10	10	10	14	18	14	13	8	6	6	7	8	9	8	10	10
26	10	11	8	11	14	15	12	12	17	16	39	42	47	35	29	19	27	23	10	12	-26	-27	26	3
27	-10	-7	5	-3	-20	-14	7	18	12	7	9	7	7	3	0	0	-1	-1	-2	-2	-3	-2	-1	-1
28	1	0	-1	2	8	6	1	2	-2	-9	-3	0	-2	-2	4	14	15	9	9	28	1	8	8	9
29	9	8	7	5	3	4	-1	7	7	8	5	4	5	0	-1	4	19	10	5	7	2	0	8	5
30	10	-3	-21	-23	-18	-12	-7	5	-11	-7	5	23	23	19	7	1	7	13	-53	-128	-68	-6	8	14
	-2	-2	-1	0	0	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	-2	-2	-1	-2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02	-688	-9	-9	-9	-8	-8	-7	-7	-5	-4	-3	-2	-2	-1	0	1	2	3	4	6	6	7	-671	02
03	-689	-10	-10	-9	-9	-9	-8	-7	-6	-5	-5	-4	-3	-2	-1	-1	0	0	1	1	2	-675	03	
04	-690	-11	-11	-10	-10	-9	-8	-8	-7	-5	-5	-4	-3	-2	-1	0	1	2	2	3	3	4	-674	04
05	-690	-11	-11	-11	-11	-11	-9	-9	-8	-7	-5	-4	-4	-3	-2	-1	1	2	3	5	6	7	-665	05
06	-698	-19	-18	-18	-11	-9	-8	-7	-5	-4	-3	-2	-1	0	1	2	3	4	5	7	7	7	-671	06
07	-691	-12	-12	-11	-11	-10	-9	-8	-4	0	2	3	5	6	8	9	10	11	12	13	13	14	-661	07
08	-687	-8	-8	-7	-7	-7	-6	-5	-5	-4	-3	-3	-2	-1	1	3	4	5	5	9	9	10	-668	08
09	-691	-12	-12	-11	-11	-10	-10	-9	-8	-7	-5	-4	-2	-1	1	3	4	6	7	9	10	11	-668	09
10	-695	-18	-15	-15	-14	-14	-12	-11	-9	-5	-2	-1	0	1	2	3	4	5	5	6	6	7	-671	10
11	-695	-16	-16	-16	-16	-15	-13	-12	-9	-9	-8	-8	-7	-7	-6	-6	-5	-4	-4	-3	-3	-1	-680	11
12	-698	-19	-18	-18	-16	-18	-15	-14	-12	-11	-10	-8	-8	-7	-5	-4	-4	-3	-2	-1	-1	0	-678	12
13	-682	-13	-11	-10	-9	-9	-8	-7	-6	-5	-4	-2	-2	-1	0	1	2	3	4	6	6	6	-673	13
14	-688	-9	-7	-6	-5	-5	-4	-3	-1	0	1	2	2	4	8	9	13	17	18	22	23	24	-655	14
15	-685	-6	-6	-6	-6	-5	-5	-4	-3	-2	-2	-1	-1	0	1	1	2	3	4	5	6	6	-672	15
16	-685	-8	-5	-5	-4	-4	-3	-2	-1	0	0	1	2	2	3	4	5	7	8	11	11	11	-688	16
17	-686	-7	-7	-7	-7	-6	-6	-4	-3	-2	-1	0	1	2	3	4	5	5	6	7	7	7	-671	17
18	-684	-5	-5	-5	-5	-4	-3	-2	-1	1	2	3	4	5	6	9	10	11	12	12	12	12	-685	18
19	-689	-8	-8	-7	-7	-6	-6	-5	-4	-3	-3	-2	-2	-1	0	1	2	3	3	5	6	6	-673	19
20	-687	-8	-7	-7	-8	-5	-4	-3	-2	-1	-1	0	0	0	1	2	2	2	3	4	4	4	-673	20
21	-681	-2	-2	1	2	4	6	8	10	12	13	14	15	18	19	23	25	27	28	30	30	31	-648	21
22	-688	-7	-5	-4	-3	-2	-1	0	2	3	4	5	6	8	11	15	21	26	27	30	30	31	-647	22
23	-680	-1	-1	-1	-1	-1	0	0	1	2	2	3	4	4	5	6	6	7	7	7	7	8	-670	23
24	-677	2	2	2	2	2	2	3	3	4	4	5	6	8	8	7	9	10	11	12	12	12	-658	24
25	-677	2	4	4	5	5	6	6	7	8	9	9	10	11	12	15	16	18	18	19	20	21	-658	25
26	-748	-67	-66	-59	-51	-35	-21	3	10	11	13	15	17	22	30	40	45	47	48	50	50	51	-628	26
27	-733	-53	-43	-29	-27	-24	-17	-10	-3	-2	-1	0	1	5	7	11	14	18	19	21	22	22	-657	27
28	-691	-12	-12	-11	-10	-9	-6	-3	-1	0	1	3	5	8	10	14	18	28	33	39	40	41	-637	28
29	-686	-7	-6	-5	-4	-3	-2	0	2	3	5	6	7	8	9	10	15	19	20	23	23	23	-655	29
30	-937	-253	-228	-192	-189	-143	-110	-47	-20	-11	-8	0	5	11	18	21	25	27	28	30	30	31	-647	30
	-937	-206	-133	-32	-20	-13	-10	-8	-5	-3	-2	-679	1	3	8	10	15	21	28	47	48	49	-628	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 3 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - DECEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	6	-1	7	-2	-3			4	0	3	4	1	0	1	1	-1	-1	-1	6	5	2	-1	-3	-2
02	4	6	10	10	5	7	7	7	5	-1	-1	-2	2	-3	5	8				-3	2	4	3	7
03	1	3	5	7	8	7	7	8	5	7	7	9	6	4	4	8	6	7	7	7	9	10	11	9
04	5	2	2	3	5	5	6	6	6	5	3	4	1	0	0	0	2	3	4	3	3	2	2	1
05	-2	-2	-1	3	3	3	5	4	5	3	1	0	1	1	-5	-6	-5	-3	2	2	5	7	9	1
06	-3	-4	0	0	3	3	1	-1	-2	0	0	-1	-2	-4	-1	-1	-4	-3	-3	-2	0	1	1	0
07	-2	-3	-2	0	0	1	2	3	7	10	8	6	2	1	1	2	0	-1	-3	-2	-1	1	3	3
08	2	2	2	2	3	3	2	2	2	2	2	3	4	4	2	1	0	-1	-1	0	0	1	2	3
09	3	2	3	2	1	-1	0	0	0	1	1	2	2	2	2	2	1	1	1	1	2	3	4	4
10	5	6	5	2	1	1	1	1	2	3	5	6	4	3	2	1	0	-1	-2	-3	-1	-3	-3	-1
11	1	0	-2	-4	-5	-3	-3	-1	-4	-4	-4	-2	0	-1	-1	-1	-1	-1	-1	-3	-3	-2	-2	0
12	0	0	1	1	1	0	0	1	1	0	1	2	2	2	1	2	2	1	-1	-2	-3	-2	-2	-2
13	-1	0	0	-1	2	2	1	-1	-1	0	1	1	2	2	3	4	4	3	2	1	1	1	0	1
14	2	3	5	5	5	4	4	3	2	1	3	3	4	8	6	10	10	9	5	10	6	5	6	8
15	6	6	9	6	6	4	4	4	4	3	1	1	1	1	2	3	4	3	4	2	2	0	0	-1
16	0	0	2	2	2	2	1	1	0	-1	-1	1	0	4	14	11	16	12	8	7	5	1	2	2
17	-1	-2	-1	2	4	5	3	1	-1	-2	-3	-3	-5	-8	-5	-5	-3	-3	-2	-4	-5	-9	-9	-10
18	-12	-13	-6	-2	-3	-2	4	4	7	1	-1	-1	-3	-4	-3	-3	-3	-2	-2	-2	-4	-5	-8	-10
19	-10	-9	-10	-7	-7	-7	-7	-8	-4	-8	-8	-9	-8	-3	-2	-8	1	-1	-1	0	-5	-3	1	3
20	-1	-5	-6	-5	-5	-5	-4	-4	-4	-5	-5	-5	-6	-7	-6	-7	-6	-5	-5	-6	-5	-5	-5	-6
21	-8	-8	-7	-6	-5	-5	-3	-1	-1	-1	-1	-4	-5	-4	-3	-5	-5	-5	-4	-3	-3	-5	-5	-5
22	-7	-7	-7	-7	-5	-3	-1	0	0	-1	-1	-2	-1	-1	0	-1	-1	1	1	6	6	-2	-2	0
23	-3	-6	-4	-4	-7	-6	-5	-4	-4	-5	-1	-5	-6	-6	-9	-12	-16	-15	-14	-15	-15	-15	-15	-11
24	-10	-11	-6	-6	-7	-6	-6	-7	-7	-2	-5	-5	-5	-5	-4	-4	-4	-4	-2	-1	1	2	2	2
25	3	2	4	5	1	5	3	3	1	7	14	10	6	3	-3	-5	-7	-7	-7	-4	-5	-5	-8	-8
26	-6	-1	1	1	1	1	0	1	0	1	0	1	4	8	11	9	11	11	27	28	25	5	9	5
27	12	11	13	17	23	34	35	14	9	6	12	8	11	10	6	7	1	-7	-7	-7	-5	-4	1	-10
28	-9	-8	-7	-8	-9	-10	-11	-10	-6	-8	-9	-9	-8	-8	-8	-7	-7	-7	-8	-8	-11	-12	-12	-11
29	-10	-10	-11	-10	-9	-11	-10	-11	-11	-10	-6	-5	-7	-6	-1	2	9	15	21	20	19	21	21	12
30	8	6	-10	25	23	21	27	25	10	9	3	4	12	9	6	10	3	2	0	-6	2	8	2	-5
31	-1	0	0	-4	-9	-11	-10	-11	-11	-14	-14	-15	-15	-10	-7	3	8	2	4	1	9	10	12	13
	0	0	0	1	1	1	1	1	1	0	0	0	1	1	0	1	0	0	0	0	1	0	1	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-690	-12	-10	-8	-6	-5	-4	-3	-1	0	0	2	3	3	5	7	8	10	11	14	14	15	-661	01
02	-684	-7	-6	-5	-4	-4	-3	-1	0	2	4	5	6	7	8	10	11	12	13	15	16	16	-659	02
03	-682	-5	-3	-2	-1	1	2	3	5	6	6	7	8	8	9	11	12	12	13	14	16	17	-658	03
04	-678	-1	-1	-1	-1	-1	0	0	1	2	2	3	4	4	5	6	7	7	7	8	8	8	-669	04
05	-683	-6	-6	-6	-6	-6	-6	-5	-2	0	1	2	3	4	5	6	7	10	10	12	12	13	-664	05
06	-688	-9	-8	-7	-6	-5	-5	-4	-3	-2	-1	0	0	1	2	2	3	5	5	7	7	8	-638	06
07	-683	-6	-6	-6	-5	-5	-4	-2	-1	0	1	1	2	3	5	7	9	10	11	13	13	13	-663	07
08	-680	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	2	3	3	4	6	6	6	7	7	7	-668	08
09	-679	-2	-2	-2	-2	-2	-1	0	0	1	2	2	3	3	3	4	5	5	5	6	6	6	-670	09
10	-682	-5	-5	-5	-5	-4	-4	-2	-1	0	1	2	3	4	5	5	6	7	8	10	10	11	-685	10
11	-683	-6	-6	-6	-6	-6	-4	-4	-3	-3	-2	-1	-1	0	0	1	1	1	2	3	4	4	-652	11
12	-683	-6	-6	-4	-4	-4	-3	-3	-1	-1	0	0	1	1	2	2	3	3	4	5	5	6	-668	12
13	-681	-4	-4	-3	-2	-2	-1	-1	0	0	1	1	1	2	2	4	5	5	5	5	6	6	-671	13
14	-679	-2	-1	0	0	0	1	2	3	4	4	5	6	7	8	10	12	15	17	20	21	21	-654	14
15	-679	-2	-2	-2	-2	-1	0	0	1	1	2	3	4	4	5	6	8	10	11	13	13	14	-663	15
16	-681	-4	-3	-3	-3	-2	-1	-1	0	1	2	2	3	5	8	12	15	17	18	19	19	19	-656	16
17	-680	-13	-13	-12	-12	-11	-9	-8	-6	-4	-3	-3	-2	-1	1	3	5	6	7	8	8	9	-666	17
18	-692	-15	-14	-14	-14	-13	-12	-10	-8	-4	-3	-2	-2	-1	1	3	5	8	10	14	14	15	-681	18
19	-693	-16	-15	-13	-13	-12	-11	-10	-8	-7	-6	-5	-4	-2	-1	2	4	5	6	8	8	10	-666	19
20	-688	-11	-9	-9	-8	-8	-7	-7	-6	-6	-6	-5	-5	-4	-4	-3	-2	0	2	6	7	8	-667	20
21	-686	-9	-9	-8	-8	-8	-7	-6	-5	-5	-4	-4	-3	-3	-2	-1	0	1	1	2	2	3	-672	21
22	-688	-11	-10	-9	-9	-8	-7	-7	-5	-3	-2	-1	-1	0	1	3	5	7	8	9	9	9	-668	22
23	-696	-19	-19	-18	-18	-17	-16	-15	-14	-12	-8	-7	-6	-5	-4	-2	-1	0	1	2	3	3	-674	23
24	-690	-13	-13	-13	-12	-12	-10	-9	-7	-6	-5	-4	-3	-2	0	2	3	3	4	5	5	6	-671	24
25	-687	-10	-10	-9	-9	-8	-7	-7	-6	-5	-1	2	3	4	5	8	12	15	16	18	18	20	-657	25
26	-685	-8	-8	-8	-8	-6	-2	-1	0	1	2	3	5	9	11	23	28	30	32	34	35	35	-642	26
27	-700	-20	-14	-12	-12	-11	-9	-7	-4	1	6	8	10	12	15	25	34	38	40	46	46	46	-629	27
28	-683	-16	-15	-14	-14	-13	-12	-11	-10	-9	-9	-8	-8	-7	-8	-8	-5	-4	-4	-2	-2	0	-677	28
29	-682	-15	-14	-13	-13	-12	-12	-11	-10	-9	-8	-6	-2	10	17	21	22	23	24	25	26	26	-649	29
30	-705	-28	-25	-18	-17	-15	-9	-5	0	2	5	7	9	12	17	24	28	30	32	34	34	34	-626	30
31	-695	-18	-18	-17	-17	-17	-15	-14	-12	-10	-8	-3	1	3	6	10	12	15	17	19	20	21	-655	31
	-705	-19	-17	-15	-14	-12	-10	-7	-5	-2	-1	-677	2	3	5	8	12	18	24	37	39	45	-626	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 4 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - JANUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	6	1	4	11	17	7	1	1	0	-6	-12	-14	-14	-15	-15	-14	-11	-10	-10	-8	-8	-9	-9	-8
02	-9	-11	-7	-2	4	-3	0	2	2	3	1	1	0	0	0	0	0	1	2	2	2	2	2	2
03	1	2	1	2	3	4	4	5	4	3	1	2	-1	-1	-2	-2	-3	2	2	0	-2	2	-2	-2
04	-1	-5	-6	2	4	4	3	4	2	2	2	-2	2	3	2	5	6	4	2	2	2	1	1	1
05	-1	-1	-1	0	3	3	3	3	6	5	4	2	1	3	4	2	3	6	9	10	11	8	8	9
06	11	6	8	8	9	6	10	14	6	15	18	29	39	40	49	56	55	52	47	27	6	-8	-47	-31
07	-8	3	-20	-18	-21	-21	-8	-35	-121	-28	18	27	23	21	3	0	-1	2	3	7	5	4	4	3
08	3	3	2	3	2	3	4	4	8	7	8	7	7	8	5	5	5	5	6	7	8	9	10	13
09	9	11	11	10	12	10	10	11	13	8	4	10	12	11	9	10	12	15	11	8	8	11	14	8
10	4	2	-1	0	2	2	3	1	-1	-1	-2	-2	-1	1	0	-1	-1	-2	0	2	-2	-4	-3	-3
11	-3	2	-5	-4	-12	-11	-11	-10	-12	-14	-12	-12	-12	-11	-11	-11	-8	-6	-7	-7	-9	-7	-10	-9
12	-7	-6	-9	-7	-9	-7	-8	-7	-6	-8	-11	-11	-7	-7	-8	-5	-3	2	7	8	3	0	1	0
13	4	5	5	2	0	0	4	2	5	8	-3	-6	-4	-3	-1	-4	0	-3	-3	0	1	2	3	5
14	5	8	10	12	10	8	2	-2	-4	-5	-6	-5	-6	-7	-4	-3	-1	2	1	0	2	1	-6	-7
15	-6	-6	-5	-5	-3	-2	-2	-3	-3	-5	-5	-6	-6	-5	-4	-4	-4	-3	1	4	7	8	4	-1
16	15	36	48	60	55	61	-17	5	9	27	10	0	-8	11	14	20	11	6	0	3	4	2	0	-1
17	-2	0	-1	0	1	1	1	1	0	-1	-2	-2	-3	-3	-3	-3	-2	-1	0	2	8	1	-2	-3
18	-4	-4																						
19																					-7	-8	-9	-9
20	-10	-10	-9	-9	-9	-8	-6	-6	-4	-4	-4	-5	-7	-7	-6	-6	-6	-3	-2	-2	-2	-2	-2	-2
21	-2	-3	-4	-4	-3	-3	-2	-1	-1	-1	-2	-1	-1	-3	-3	-3	-4	-3	-2	-1	-1	-2	-2	-2
22	-2	-2	-2	0	0	-1	1	3	4	2	0	3	1	-1	0	-2	-3	-3	-5	-3	-3	-4	-5	-3
23	-3	-4	-8	-7	-8	-8	-7	-8	-7	-8	-9	-10	-8	-3	-4	-4	-4	-2	7	7	9	1	-1	-5
24	-4	-4	-4	-4	-1	-2	-1	-2	-1	1	3	3	3	3	3	1	1	3	4	4	2	1	0	1
25	1	-2	-5	-5	-2	-3	-3	-2	-1	0	5	8	2	7	9	8	8	2	-4	-8	-10	-7	-5	-9
26	-12	-9	-7	-5	-7	-8	-10	-12	-11	-11	-11	-10	-9	-8	-8	-7	-7	-8	-8	-9	-10	-9	-9	-8
27	-7	-6	-8	-8	-7	-8	-7	-7	-8	-9	-10	-8	-7	-6	-8	-7	-8	-7	-8	-8	-7	-7	-8	-7
28	-7	-9	-9	-8	-8	-10	-9	-9	-11	-12	-11	-11	-10	-9	-9	-5	-7	-7	-6	-7	-8	-9	-8	-7
29	-8	-5	-3	-3	-2	-1	-1	-2	-3	-3	-1	-2	-2	-1	0	2	1	1	0	-1	-1	-2	-2	-3
30	-3	-2	-1	2	4	5	5	4	3	2	1	-1	-1	1	2	4	6	4	4	3	3	2	2	1
31	0	1	3	3	3	4	4	4	3	5	7	6	6	1	0	-2	-1	1	1	-1	-2	-4	-5	-5
	-2	-2	-2	0	1	0	0	0	0	0	0	-1	-1	0	0	-1	-1	1	1	2	1	0	-2	-2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-696	-21	-21	-19	-19	-18	-16	-14	-12	-11	-9	-8	-6	0	4	9	13	18	22	25	25	25	-648	01
02	-690	-18	-15	-13	-12	-11	-10	-7	-1	0	1	1	2	2	2	3	4	5	8	9	9	10	-650	02
03	-681	-7	-7	-7	-6	-5	-4	-3	-2	0	1	2	2	3	4	5	6	6	7	8	8	8	-665	03
04	-681	-7	-7	-7	-7	-6	-5	-3	-1	1	1	2	3	3	4	5	6	6	7	8	8	8	-666	04
05	-677	-3	-3	-3	-3	-2	-2	-1	2	2	3	4	5	6	8	10	11	13	14	15	16	16	-652	05
06	-732	-58	-57	-53	-51	-48	-38	-12	5	8	10	14	20	30	43	52	55	59	61	63	64	64	-610	06
07	-699	-225	-210	-184	-160	-124	-80	-54	-21	-7	0	2	3	5	9	21	27	32	34	36	36	37	-637	07
08	-678	-2	-1	0	1	1	2	3	4	5	5	6	7	8	8	9	12	13	15	17	18	18	-656	08
09	-676	-2	0	1	1	3	5	7	8	9	10	11	11	12	13	15	16	17	18	20	20	21	-653	09
10	-686	-12	-10	-8	-7	-6	-4	-3	-2	-1	-1	0	1	1	2	3	4	5	7	10	10	11	-663	10
11	-694	-19	-19	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-3	0	3	4	6	7	8	-666	11
12	-688	-14	-14	-13	-13	-12	-11	-10	-9	-7	-6	-6	-5	-2	1	4	7	9	10	12	12	12	-644	12
13	-682	-8	-8	-8	-7	-6	-5	-4	-3	-1	0	1	2	3	5	6	7	9	9	10	10	10	-662	13
14	-689	-14	-12	-11	-10	-9	-8	-7	-5	-4	-2	0	1	3	7	10	11	12	13	15	15	15	-658	14
15	-687	-12	-11	-10	-9	-9	-8	-7	-5	-4	-4	-3	-2	-1	1	5	7	8	9	11	11	13	-661	15
16	-721	-47	-44	-30	-25	-19	-8	-2	1	3	6	10	14	20	37	55	60	63	65	71	72	73	-583	16
17	-681	-7	-8	-6	-5	-4	-4	-3	-3	-2	-1	-1	0	1	2	3	5	7	8	11	12	13	-659	17
18	-681	-7	-7	-7	-7	-7	-7	-6	-5	-5	-4	-4	-4	-3	-3	-2	-2	-2	-1	0	0	0	-674	18
19	-689	-15	-14	-13	-12	-12	-11	-10	-10	-9	-9	-9	-8	-8	-8	-7	-6	-5	-5	-2	-2	-2	-675	19
20	-688	-14	-12	-12	-11	-10	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2	3	4	7	-685	20
21	-686	-12	-7	-7	-6	-6	-5	-4	-3	-3	-3	-2	-2	-2	-1	0	1	2	2	3	3	4	-689	21
22	-683	-9	-8	-8	-8	-8	-5	-4	-3	-3	-2	-1	0	0	1	3	3	4	5	7	8	8	-668	22
23	-688	-14	-13	-12	-12	-11	-10	-9	-8	-7	-6	-5	-3	-3	0	6	8	9	10	11	12	12	-662	23
24	-683	-9	-9	-8	-8	-7	-5	-3	-2	-1	0	1	2	3	3	4	5	8	7	8	8	9	-684	24
25	-689	-15	-14	-13	-12	-11	-9	-8	-5	-4	-3	-1	0	2	6	8	9	10	11	11	11	12	-661	25
26	-692	-17	-15	-14	-14	-13	-12	-12	-11	-10	-9	-9	-8	-8	-7	-6	-5	-4	-2	0	1	1	-671	26
27	-684	-10	-10	-10	-10	-10	-10	-9	-8	-7	-7	-6	-6	-6	-5	-4	-4	-3	-3	-2	-2	-2	-676	27
28	-689	-15	-14	-14	-14	-13	-12	-11	-10	-9	-9	-8	-8	-7	-7	-5	-5	-4	-3	-2	-1	-1	-675	28
29	-682	-8	-8	-7	-7	-7	-5	-4	-3	-3	-2	-1	-1	0	1	2	2	3	3	4	5	6	-668	29
30	-679	-5	-5	-5	-4	-3	-3	-2	0	1	2	3	3	4	5	6	8	7	7	8	9	9	-685	30
31	-681	-7	-7	-7	-7	-6	-5	-4	-2	0	1	2	3	4	5	6	7	8	8	9	9	9	-685	31
	-696	-197	-108	-44	-21	-14	-11	-9	-6	-4	-2	-674	1	3	5	9	13	29	49	63	64	68	-583	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 5 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - FEBRUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-6	-6	-4	-2	-2	-2	1	1	1	0	0	-2	-2	-3	-2	-2	-1	0	2	3	3	2	0	0
02	-1	-3	-3	-2	1	1	5	4	4	2	-1	-5	-8	-6	-8	-8	-7	-2	-2	-1	-1	-2	-3	-3
03	-4	-5	-6	-5	-3	-2	-2	-1	0	-1	0	1	-1	-2	-4	-4	-3	-3	-4	-3	3	0	0	0
04	6	3	-1	2	8	9	12	13	20	23	6	3	4	2	3	5	2	3	1	3	2	3	2	5
05	8	4	3	0	1	3	2	5	4	2	3	2	2	3	-1	-5	-5	-4	-3	-3	-4	-4	-4	-4
06	-3	-5	-5	-7	-8	-8	-8	-8	-8	-7	-6	-7	-7	-7	-9	-10	-9	-8	-10	-10	-9	-9	-8	-6
07	-5	-3	-5	-6	-7	-7	-6	-7	-6	-6	-4	-3	-3	-3	-3	0	2	0	-1	0	-3	-4	-6	-2
08	0	-2	-2	-2	0	1	0	0	-1	0	0	1	1	2	1	1	1	1	0	-1	1	0	1	1
09	2	3	3	3	4	3	3	3	1	1	1	1	2	3	2	1	1	0	0	0	1	1	0	1
10	4	4	1	1	3	2	7	7	4	-4	-7	-7	-9	-7	-7	-8	-9	-9	-9	-9	-8	-7	-6	-5
11	-3	-2	-2	-1	-1	3	8	9	5	8	7	0	-2	-2	-2	-2	-1	1	1	1	0	-1	-1	0
12	0	-1	0	-1	0	0	1	0	-1	-2	-3	-2	-1	0	1	1	2	3	5	2	1	0	0	3
13	4	4	8	9	7	6	1	1	-2	-3	-2	-3	-4	-3	-5	-4	-6	-4	-3	-3	-3	-3	-4	-8
14	-9	-11	-10	-8	-7	-7	-4	-7	-9	-9	-12	-12	-11	-9	-8	-4	-1	1	2	4	5	5	8	13
15	-2	-19	0	-2	-1	14	13	18	6	-4	0	-3	5	3	0	-1	2	3	2	-1	4	11	20	24
16	0	-7	0	-2	5	6	3	0	6	15	24	12	8	10	15	21	22	15	11	2	3	4	2	1
17	1	0	0	0	0	1	1	2	2	4														
18																6	5	7	7	7	7	7	8	6
19	4	2	4	2	2	5	6	14	14	11	10	9	8	8	8	5								
20		10	9	7	7	8	9	10	13	15	11	-11	12	16	12	9	10	9	8	8	8	9	9	9
21	9	10	10	7	12																			
22																								
23																								
24																								
25																								
26																								
27																								
28																								
	0	-1	0	0	1	2	3	3	2	1	0	-1	-1	0	-1	-1	0	0	1	0	1	1	0	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-683	-9	-9	-9	-8	-7	-6	-4	-3	-2	-1	0	0	1	2	3	3	4	5	5	6	6	-668	01
02	-684	-10	-10	-10	-10	-9	-9	-8	-5	-3	-3	-2	-2	0	1	4	5	6	6	8	8	9	-685	02
03	-681	-7	-7	-7	-7	-6	-6	-5	-4	-3	-3	-2	-1	0	2	7	8	9	9	11	11	11	-663	03
04	-677	-3	-3	-2	-2	-1	0	1	2	3	3	4	5	6	10	15	21	24	25	27	27	27	-648	04
05	-681	-7	-7	-7	-7	-7	-6	-5	-4	-3	-1	1	2	3	4	5	7	8	9	11	12	12	-662	05
06	-685	-11	-11	-11	-11	-11	-10	-10	-9	-9	-8	-7	-7	-6	-5	-4	-3	-3	-2	0	0	1	-672	06
07	-683	-9	-9	-9	-9	-9	-9	-8	-7	-6	-5	-4	-3	-3	-2	1	2	3	3	5	5	5	-669	07
08	-677	-3	-3	-3	-3	-3	-3	-2	-1	0	0	0	1	1	1	2	3	3	3	4	4	4	-669	08
09	-674	0	0	0	0	0	0	0	0	1	1	2	2	3	3	4	4	5	5	5	5	7	-667	09
10	-685	-11	-11	-11	-11	-10	-10	-9	-8	-8	-7	-5	-3	2	3	5	7	9	10	11	11	11	-663	10
11	-680	-6	-6	-5	-4	-4	-3	-3	-2	-1	0	0	1	2	5	8	9	10	11	13	13	14	-660	11
12	-682	-8	-8	-7	-6	-5	-4	-3	-2	-1	0	0	1	2	3	4	4	6	7	9	9	10	-664	12
13	-684	-10	-10	-9	-9	-8	-7	-6	-4	-3	-2	-2	-1	1	4	6	8	11	12	14	15	15	-659	13
14	-686	-12	-12	-12	-12	-12	-12	-12	-10	-8	-8	-7	-4	0	3	7	9	16	21	26	26	27	-648	14
15	-708	-34	-33	-30	-27	-20	-10	-7	-2	0	1	2	4	7	11	18	22	25	27	29	30	32	-642	15
16	-686	-12	-11	-10	-9	-8	-5	-2	1	2	4	5	8	12	16	22	24	27	28	31	32	32	-642	16
17	-678	-4	-4	-4	-4	-3	-2	-1	-1	0	0	1	1	2	3	4	5	7	8	11	11	11	-663	17
18	-673	1	1	1	2	3	4	5	6	6	6	7	7	8	8	9	10	10	11	11	12	12	-662	18
19	-674	0	0	0	0	0	1	2	3	4	5	6	7	9	10	13	16	18	19	20	20	20	-654	19
20	-698	-24	-23	-21	-19	-15	0	6	7	8	9	9	10	10	12	15	18	18	19	22	23	23	-651	20
21	-671	3	3	3	3	4	5	7	8	9	9	10	10	11	12	13	15	17	17	19	20	20	-654	21
22																								22
23																								23
24																								24
25																								25
26																								26
27																								27
28																								28
	-708	-33	-22	-12	-11	-10	-9	-7	-4	-2	-1	-671	2	3	5	9	12	18	22	28	29	30	-642	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 6 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - MARCH 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																								
13																								
14																		-9	-8	-11	-11	-11	-12	-11
15	-9	-6	1	2	4	5	4	11	4	1	-1	-1	1	5	2	-3	-5	-5	-8	-7	-8	-9	-9	-9
16	-10	-10	-8	-7	-3	-3	-2	-1	-9	57	38	17	0	-2	-6	-8	-4	19	27	30	4	3	6	9
17	28	13	43	50	42	38	39	13	-11	15	46	49	49	51	46	19	15	18	3	18	28	9	11	6
18	1	3	18	26	6	5	-5	-5	-1	5	6	2	1	3	4	7	21	38	38	34	32	16	25	36
19	10	3	1	2	-2	-4	-8	-8	-15	-25	-13	1	-2	-8	0	2	20	7	24	2	7	6	13	43
20	13	38	46	44	56	51	51	53	46	52	57	54	59	55	40	37	35	32	44	49	51	77	39	33
21	30	42	40	17	1	-2	-2	15	12	3	-1	-2	-5	-6	-8	-9	-9	-7	-5	-5	-3	-2	-3	-2
22	0	2	2	0	2	3	10	21	26	25	27	25	20	18	18	10	9	3	3	0	23	46	54	54
23	5	12	12	0	6	13	5	9	3	-1	-1	0	-1	-2	-4	-7	-7	-11	-11	-11	-10	-9	-9	-8
24	-7	-7	-7	-9	-7	-11	-4	-3	0	-5	-5	-10	-6	-5	-5	-6	-7	-6	-9	-12	-9	-15	-16	-4
25	0	-6	-7	-13	-21	-34	-1	-5	-9	-9	-9	-7	-6	-3	-3	-3	-5	-6	-7	-4	-6	-4	-3	-5
26	-5	-3	0	3	2	3	0	0	0	-3	0	0	3	2	1	-1	-3	-4	-5	4	0	-3	-9	-7
27	-7	-9	-6	-7	-7	-5	-5	-6	-6	-7	-9	-6	-4	-4	-5	-5	-7	-9	-9	-9	-10	-10	-9	-9
28	-6	-3	0	8	6	5	5	6	3	5	4	5	0	2	1	1	-1	-3	-6	-8	-6	-15	25	55
29	56	57	58	41	58	50	22	12	0	5	4	15	9	3	-10	-3	10	5	2	-7	-9	-11	-14	-13
30	-13	-4	-5	-8	-2	32	8	0	-1	-5	-5	-2	-3	-3	-5	-5	-2	-2	-3	-5	-7	-4	-5	-9
31	-10	-9	-7	-5	-5	-3	-2	-5	-5	-7	-8	-9	-9	-9	-9	-8	-8	-7	-8	-1	13	27	2	5
	-2	-1	2	2	2	3	4	5	0	1	2	2	1	1	-3	-2	-2	-3	-4	-4	-4	-3	-4	-2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12																								12
13																								13
14	-683	-14	-14	-14	-14	-14	-14	-14	-13	-13	-12	-12	-11	-9	-8	-8	-7	-7	-6	-6	-6	-6	-675	14
15	-698	-28	-27	-17	-11	-11	-10	-9	-8	-4	-3	0	1	2	4	7	17	19	19	19	22	24	-644	15
16	-687	-18	-17	-14	-13	-12	-10	-9	-7	-4	-3	0	4	9	18	37	58	58	58	59	59	59	-810	16
17	-689	-20	-19	-16	-15	-11	-3	4	9	14	21	29	38	44	47	50	55	56	63	69	69	69	-600	17
18	-679	-10	-10	-10	-9	-7	-3	-2	1	4	5	9	12	25	34	37	39	43	44	52	53	54	-615	18
19	-698	-30	-30	-29	-28	-25	-19	-11	-7	-4	-1	1	3	6	11	24	34	43	44	45	45	45	-600	19
20	-682	-13	-13	-13	-10	-3	22	31	37	42	47	51	54	55	58	69	78	78	79	79	79	79	-580	20
21	-680	-11	-11	-11	-11	-11	-10	-9	-6	-5	-3	-1	0	4	14	33	41	45	53	54	54	66	-587	21
22	-680	-11	-11	-9	-8	-3	0	1	3	5	10	14	19	28	27	49	54	55	55	58	58	58	-613	22
23	-689	-13	-13	-13	-13	-13	-12	-11	-8	-7	-4	-1	2	3	8	12	16	18	18	36	36	36	-633	23
24	-689	-20	-20	-19	-18	-17	-15	-11	-10	-9	-8	-7	-4	-4	-3	0	1	2	4	6	7	8	-681	24
25	-724	-55	-53	-48	-44	-39	-27	-16	-9	-8	-7	-6	-5	-4	-3	0	5	6	6	12	12	12	-657	25
26	-691	-20	-17	-11	-11	-10	-9	-4	-3	-2	-1	0	1	2	3	5	8	8	11	12	12	15	-652	26
27	-680	-11	-11	-11	-11	-11	-11	-11	-10	-9	-8	-8	-7	-6	-5	-4	-3	2	5	10	11	11	-658	27
28	-722	-53	-49	-37	-32	-22	-11	-8	-3	-2	0	2	4	8	7	13	53	55	55	57	58	58	-611	28
29	-700	-27	-22	-21	-20	-18	-15	-12	-7	-1	4	8	11	20	55	56	58	58	59	59	59	60	-609	29
30	-702	-33	-30	-18	-15	-13	-10	-8	-5	-5	-4	-4	-3	-1	0	6	15	42	49	52	52	52	-617	30
31	-680	-11	-11	-11	-11	-11	-10	-10	-9	-7	-6	-5	-4	-3	-1	6	13	28	34	37	37	40	-627	31
	-724	-53	-41	-25	-19	-14	-11	-8	-7	-4	-3	-689	3	7	17	40	54	57	68	78	78	79	-580	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 7 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - APRIL 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	7	6	9	6	12	9	10	6	6	8	8	6	6	6	5	6	8	10	10	10	12	8	3	-2
02	-7	-13	-8	-5	-2	-3	3	4	1	3	4	-1	-2	-6	13	14	8	-2	12	13	13	-3	-1	6
03	5	3	0	-1	2	3	3	5	10	11	14	17	11	28	46	20	-5	-3	9	19	26	21	13	14
04	9	16	16	10	7	4	8	8	6	9	6	2	-1	-4	-8	-8	-8	-7	-8	-7	-5	-5	-3	6
05	20	19	50	17	46	20	14	8	-14	-56	-81	-117	-204	-185	-183	-161	-177	-174	-43	20	17	8	8	-3
06	-3	3	3	3	8	10	10	10	8	10	9	12	3	2	-2	-2	-2	-2	-3	-2	1	5	6	8
07	7	3	3	6	6	12	21	21	24	25	23	23	13	14	15	19	10	10	10	8	4	4	5	5
08	3	4	2	2	2	2	-1	1	6	6	5	5	5	6	5	2	-4	-5	-7	-7	-4	-1	2	6
09	2	-2	0	4	3	3	2	2	3	5	6	10	10	7	8	9	10	7	3	1	2	4	0	2
10	4	7	7	7	8	13	13	7	8	6	7	14	12	10	8	3	2	0	-2	-2	-2	-3	-3	-2
11	-2	1	2	4	5	5	7	7	7	5	4	4	7	6	5	5	3	2	0	0	-2	-3	-3	-2
12	-2	1	3	9	9	9	8	6	6	7	8	5	7	7	5	5	5	0	1	-2	-2	-3	-3	-4
13	-4	-3	0	4	4	6	4	5	5	-1	-2	-3	-3	-3	-2	-2	4	0	1	1	-2	-1	-2	7
14	7	1	5	3	1	1	1	-2	2	0	-5	-7	-9	-9	-7	-7	-6	-8	-5	-4	-3	-4	-7	-6
15	-5	-3	-2	0	1	2	2	2	4	2	0	1	3	1	-1	0	0	0	1	1	0	-1	-3	-3
16	-3	-2	0	2	2	5	9	6	10	5	5	8	4	58	60	57	3	8	13	38	18	37	-1	5
17	-3	-7	-6	-2	-2	-3	0	-1	0	5	3	1	5	3	3	9	6	5	3	-1	-11	-20	-24	-38
18	-30	-4	22	13	7	5	4	-1	-2	-3	-3	-3	-5	-9	-12	-16	-13	-8	-11	-12	-9	-8	-7	-10
19	-12	-13	-11	-8	-8	-4	-5	-1	5	-1	-1	-2	-4	-7	-10	-11	-13	-12	-12	-12	-10	-12	-12	-12
20	-12	-10	-11	-7	-8	-8	-5	-11	-4	1	0	14	35	18	8	6	-7	-16	-7	-5	-3	5	-12	-7
21	-11	-9	-4	0	-5	-3	4	8	13	3	4	-1	-2	-1	-1	-5	-7	-7	-6	-6	-8	-9	-7	-8
22	-10	-12	-11	-13	-11	-8	-9	-4	-4	-7	-5	-2	-6	-7	-8	-9	-11	-12	-12	-12	-11	-9	-4	-5
23	-1	1	0	-3	3	1	-3	-6	-4	-2	0	4	2	0	-8	-9	-7	-6	0	0	1	-1	1	2
24	2	4	4	0	-5	-6	-8	-10	-10	-9	-9	-8	-6	-5	-2	-7	-9	-11	-12	-12	-9	-12	-11	-10
25	-5	-8	-9	-8	-11	-8	1	0	-9	-8	-10	-8	-6	-5	-5	-4	-5	-6	-8	-9	-8	-8	-10	-9
26	-7	-6	-4	-4	-4	-4	-5	-6	-7	-9	-7	-9	-8	-6	-2	1	-4	-6	-6	-2	-5	4	1	6
27	12	13	12	11	12	17	4	3	2	-1	1	5	-1	1	0	3	1	0	-2	-10	-11	-13	-14	-13
28	-11	-8	-7	-7	-6	-4	-5	-6	-6	-6	-8	-9	-6	-6	-5	-7	-8	-8	-10	-11	-11	-14	-15	-15
29	-13	-10	-8	-3	-1	0	5	7	-1	-3	-4	-6	-7	-7	-8	-5	-5	-5	-5	-5	-5	-4	-8	-4
30	-7	-8	-5	-1	-1	1	1	2	2	2	0	-2	-4	-5	-4	1	4	3	2	3	-1	-2	-5	-3
	-2	0	0	3	2	3	4	4	4	3	3	3	-1	-1	0	0	-3	-3	-2	-1	-2	-2	-3	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-679	-3	-3	-3	-3	-2	0	4	5	6	6	7	8	12	12	13	13	13	13	18	18	18	-658	01
02	-692	-18	-18	-15	-15	-13	-9	-7	-4	-3	-1	1	3	6	8	16	17	22	22	42	44	46	-630	02
03	-686	-10	-10	-8	-7	-6	-3	-1	1	3	5	9	12	17	22	31	43	49	50	55	58	60	-615	03
04	-685	-9	-9	-9	-9	-9	-8	-7	-6	-5	-2	2	6	7	11	12	17	20	21	33	33	33	-643	04
05	-1014	-335	-322	-263	-250	-231	-208	-189	-150	-73	-20	1	10	16	21	43	49	52	55	60	61	61	-615	05
06	-704	-7	-6	-5	-5	-4	-4	-2	-1	0	3	5	6	8	11	12	15	18	18	22	23	23	-653	06
07	-680	-4	-4	-3	-1	0	1	3	5	6	8	12	13	18	24	25	42	43	43	62	62	62	-614	07
08	-687	-11	-11	-10	-9	-8	-7	-5	-2	1	2	3	4	5	8	7	8	8	12	18	18	20	-658	08
09	-679	-3	-3	-3	-3	-3	-1	0	1	3	4	5	6	8	10	11	12	13	20	23	23	23	-653	09
10	-680	-4	-4	-4	-4	-4	-4	-3	-1	1	4	7	8	9	11	14	17	23	25	27	28	28	-648	10
11	-680	-4	-4	-4	-4	-4	-2	-1	-1	0	2	3	5	6	7	8	9	10	10	11	12	13	-663	11
12	-683	-7	-7	-7	-6	-6	-4	-3	-1	1	3	5	7	8	9	10	12	13	14	15	15	15	-659	12
13	-683	-7	-6	-6	-6	-5	-4	-4	-2	-1	0	1	1	4	5	7	7	8	10	13	15	16	-660	13
14	-702	-12	-12	-11	-11	-11	-10	-8	-7	-6	-5	-3	-2	0	2	4	6	8	10	16	16	16	-660	14
15	-682	-6	-6	-4	-4	-4	-4	-3	-2	-2	-1	0	2	2	3	3	4	4	6	8	8	8	-652	15
16	-703	-27	-22	-17	-14	-10	-4	-2	1	3	5	7	10	13	25	55	82	83	84	71	72	72	-602	16
17	-720	-44	-44	-42	-41	-38	-27	-20	-7	-5	-2	1	3	4	5	7	9	11	12	16	17	21	-654	17
18	-718	-40	-40	-37	-34	-30	-17	-14	-12	-10	-8	-6	-4	-1	2	8	14	26	31	37	38	38	-638	18
19	-692	-16	-16	-14	-14	-13	-13	-12	-12	-11	-10	-8	-7	-5	-3	0	1	5	7	8	10	12	-664	19
20	-697	-21	-20	-20	-19	-18	-16	-13	-10	-8	-6	-5	-2	2	8	15	31	42	43	47	47	47	-628	20
21	-696	-20	-20	-19	-17	-14	-9	-8	-7	-6	-5	-4	-1	1	3	8	11	14	15	17	17	20	-654	21
22	-701	-21	-18	-17	-16	-14	-13	-12	-11	-11	-9	-8	-7	-6	-4	-3	-1	1	4	7	8	8	-688	22
23	-690	-14	-14	-12	-12	-11	-9	-7	-4	-3	-1	0	1	1	3	4	5	7	8	11	12	12	-664	23
24	-692	-18	-14	-14	-13	-13	-12	-12	-10	-9	-8	-7	-7	-5	-3	2	4	7	7	8	8	8	-688	24
25	-692	-16	-14	-14	-13	-13	-11	-10	-9	-8	-7	-7	-5	-5	-4	-2	0	3	4	8	11	13	-663	25
26	-687	-11	-10	-10	-10	-9	-9	-8	-7	-6	-5	-4	-4	-3	-1	3	5	10	11	14	16	17	-659	26
27	-691	-15	-15	-15	-15	-15	-14	-13	-9	-1	0	2	4	6	10	14	16	22	23	38	45	49	-625	27
28	-693	-17	-17	-17	-17	-16	-15	-12	-11	-9	-8	-7	-6	-6	-4	-4	-3	-3	-2	1	1	1	-675	28
29	-689	-13	-13	-13	-13	-13	-11	-8	-7	-4	-4	-4	-3	-3	-1	3	6	8	10	12	12	12	-664	29
30	-688	-10	-10	-9	-9	-8	-7	-6	-4	-3	-2	-1	0	1	2	3	4	6	7	8	8	8	-684	30
	-1014	-283	-221	-171	-73	-18	-12	-9	-7	-4	-1	-676	3	5	8	12	17	31	44	83	84	89	-602	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 8 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - MAY 1987

RELATIVE HOURLY MEDIAN (dB)																							
DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	3	4	5	7	8	10	12	12	11	10	8	8	8	5	5	6	8	8	8	8	8	8	5	4
02	1	1	1	0	1	1	4	5	5	4	5	5	5	7	3	-1	-12	-12	-8	-9	-8	-8	-10	-9
03	-9	-9	-5	-2	-6	-9	-5	-4	-2	-4	-5	-2	-1	-3	-6	-11	-10	-1	-1	-2	-5	-6	-4	-6
04	-6	-3	-3	-1	0	3	3	-2	3	4	-2	-2	-6	-6	-3	4	-3	-5	-7	1	-4	1	-2	-9
05	-11	-8	-8	-1	-1	6	9	3	-6	-4	-7	-5	-7	-2	1	-1	-12	-6	-7	-9	-10	-11	-6	-6
06	-1	11	13	2	5	2	-1	3	1	2	2	1	4	3	3	-2	-1	-6	-9	-8	-4	-4	1	1
07	8	15	11	12	5	9	7	6	5	7	11	10	13	13	18	20	21	19	22	19	22	25	22	22
08	1	3	2	1	4	-1	-1	-3	-4	-1	-1	-2	0	1	-1	2	2	0	2	1	2	4	3	3
09	4	4	4	4	5	6	1	0	-4	-6	-3	-5	-8	-8	-9	-11	-12	-12	-12	-12	-12	-13	-12	-7
10	-6	-3	-1	-3	-4	-2	-2	3	7	8	12	16	14	22	4	-7	-11	-15	-15	-14	-12	-8	2	-1
11	-7	-9	-8	0	0	2	-2	-1	-5	-5	-6	-3	-7	-7	-5	-3	-5	-1	1	-2	-10	-8	-9	-3
12	2	2	5	7	10	10	14	15	13	9	9	15	11	3	1	-3	-4	-5	-8	-7	-8	-7	-4	2
13	7	11	14	18	20	12	9	7	9	8	8	18	17	-2	2	1	1	1	-2	-4	-6	-6	-4	-5
14	-7	-7	-5	-4	-2	0	0	1	1	2	2	0	-1	-2	-2	-2	-1	-1	0	0	0	-5		
15																								
16													-4	-6	-6	-7	-7	-7	-6	-5	-6	-6	-7	-7
17	-8	-6	-4	-2	2	3	4	5	7	7	6	4	1	-1	-3	-3	-1	-1	-1	-1	0	0	0	0
18	0	0	3	2	2	4	5	5	8	8	6	5	1	0	-2	-2	-1	-1	3	3	4	5	4	4
19	-3	-3	4	-1	4	6	8	5	3	1	0	6	1	-2	-12	-14	-15	-15	-13	-11	-10	-7	-8	-6
20	0	10	6	4	4	3	-8	6	11	10	4	9	7	1	-3	-1	-3	-3	-3	-3	-2	-2	-2	0
21	2	5	2	3	1	1	2	3	0	4	3	-1	0	3	2	6	8	5	-3	-6	-7	-6	-5	0
22	7	9	8	8	8	10	9	7	3	5	5	3	5	5	4	3	3	2	1	2	2	2	3	2
23	-3	-3	1	0	-2	-1	0	1	-1	-1	-2	0	1	1	1	-2	-2	-4	-5	-6	-10	-9	-4	-3
24	-3	-1	-1	-2	-4	-4	-6	-6	0	-3	-5	-4	-4	-4	-4	-3	-5	-7	-9	-9	-11	-11	-12	-10
25	-9	-7	-3	0	0	-3	-8	-8	-9	-10	-6	-6	-5	-4	-4	-3	-3	-4	-5	-7	-8	-8	-8	-7
26	-4	-3	-1	-2	-1	-1	2	1	4	3	1	-2	-1											
27	5	8	5	6	6	4	1	-4	-6	-10	-6	-6	-3	2	8	15	21	13	7	5	7	11	14	14
28	-2	-2	-4	-12	-8	-5	-3	-2	0	2	2	-1	-4	1	-3	-2	4	16	14	19	20	8	8	1
29	-4	-4	1	9	-5	-11	-7	-9	-9	-8	-10	-13	-15	-15	-15	-14	-14	-14	-11	-10	-8	-9	-15	-14
30	-10	-4	1	1	9	10	5	8	7	8	1	1	2	1	-2	-1	-1	-4	-4	-10	-14	-18	-23	-17
31	-5	-8	-10	-10	-7	-7	-9	-8	-5	-10	-5	-6	-6	-9	-5	-2	-11	-12	-12	-12	-11	-11	-12	-11
	-2	-1	2	1	2	3	2	2	3	3	2	0	0	0	-1	-2	-2	-3	-3	-5	-6	-6	-4	-3

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:																							
DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-683	-1	-1	-1	0	1	3	4	5	6	7	7	8	9	10	11	13	14	14	14	15	17	-664	01
02	-695	-13	-13	-13	-13	-12	-11	-10	-8	-7	0	1	2	4	5	6	7	9	10	11	11	11	-671	02
03	-696	-14	-14	-13	-13	-11	-11	-10	-7	-7	-6	-5	-4	-3	-2	-1	0	2	3	4	4	4	-675	03
04	-694	-12	-12	-11	-10	-10	-9	-7	-6	-4	-3	-1	0	2	3	6	9	14	18	19	19	21	-680	04
05	-702	-20	-19	-17	-15	-14	-13	-11	-8	-7	-6	-5	-3	-1	0	4	9	12	13	17	17	18	-684	05
06	-693	-11	-11	-10	-10	-9	-8	-8	-3	-1	1	2	3	4	5	7	11	14	16	17	17	17	-681	06
07	-682	0	0	0	1	1	4	5	7	10	12	13	17	20	22	24	26	27	27	30	32	35	-639	07
08	-689	-7	-6	-6	-5	-4	-3	-2	-1	0	0	1	2	3	3	5	6	8	8	7	7	7	-674	08
09	-698	-16	-16	-16	-16	-15	-13	-13	-12	-10	-8	-6	-4	0	3	5	6	8	9	9	10	11	-671	09
10	-698	-16	-16	-16	-16	-16	-15	-14	-9	-5	-3	-2	0	3	10	16	19	22	24	27	27	27	-655	10
11	-693	-11	-11	-11	-10	-10	-9	-9	-8	-6	-5	-4	-3	-2	-1	1	2	4	5	7	7	7	-675	11
12	-694	-12	-11	-10	-10	-9	-8	-7	-5	-2	1	4	8	10	11	15	16	16	17	18	18	20	-681	12
13	-690	-8	-8	-8	-7	-6	-6	-5	-3	0	2	6	8	10	13	18	21	23	24	25	26	26	-655	13
14	-691	-9	-9	-8	-8	-8	-7	-6	-3	-2	-1	-1	0	1	1	1	2	3	4	5	5	5	-677	14
15																								15
16	-697	-15	-15	-10	-9	-8	-8	-8	-7	-7	-8	-8	-8	-5	-5	-5	-4	-3	-3	-2	-1	-1	-683	16
17	-699	-17	-16	-10	-9	-8	-6	-4	-2	-1	-1	0	1	2	5	7	7	9	9	10	11	12	-670	17
18	-685	-3	-3	-3	-3	-2	-2	-1	0	1	2	3	4	5	6	7	8	9	9	10	10	11	-671	18
19	-698	-17	-17	-16	-16	-16	-15	-14	-11	-8	-5	-2	0	2	5	7	9	10	11	12	12	12	-687	19
20	-691	-9	-9	-9	-9	-8	-4	-3	-2	-2	0	1	4	5	7	11	12	14	15	18	18	19	-683	20
21	-691	-9	-9	-9	-8	-6	-6	-5	-3	0	1	2	3	4	5	6	9	10	10	10	11	12	-670	21
22	-683	-1	-1	0	0	0	1	2	3	3	4	5	6	7	9	9	10	11	11	12	12	12	-689	22
23	-693	-11	-11	-11	-11	-10	-9	-7	-4	-3	-2	-1	-1	0	1	2	3	4	5	5	6	7	-675	23
24	-694	-12	-12	-12	-12	-12	-11	-11	-9	-7	-5	-4	-4	-3	-2	-1	0	2	3	7	7	9	-672	24
25	-693	-11	-11	-11	-11	-11	-10	-9	-8	-7	-6	-5	-4	-4	-3	-1	0	1	1	4	4	4	-659	25
26	-687	-5	-5	-5	-5	-5	-3	-3	-2	-2	-1	-1	1	2	3	4	5	8	7	11	11	12	-670	26
27	-693	-11	-11	-11	-10	-10	-8	-6	-3	2	5	6	7	9	12	16	19	22	23	25	26	26	-656	27
28	-698	-14	-14	-14	-13	-12	-10	-8	-4	-2	-1	0	1	4	10	17	20	23	24	24	24	24	-658	28
29	-700	-18	-18	-17	-17	-15	-15	-14	-14	-13	-11	-10	-8	-7	-6	-1	4	14	16	20	21	21	-661	29
30	-707	-25	-25	-24	-23	-23	-20	-18	-10	-5	-2	0	1	4	5	9	10	11	13	14	14	16	-685	30
31	-709	-27	-25	-17	-13	-13	-12	-12	-11	-10	-10	-8	-7	-6	-5	-3	-2	0	1	6	8	9	-673	31
	-709	-24	-22	-18	-15	-14	-11	-9	-8	-4	-2	-682	1	3	6	10	14	20	22	27	27	28	-639	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 9 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - JUNE 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-12	-12	-11	-11	-8	-5	1	5	5	1	-2	-8	-9	-10	-11	-11	-11	-10	-8	-7	-5	-5	-5	-8
02	-3	-2	0	0	7	0	0	9	9	6	9	9	14	3	-3	-54	-1	-81	-101	-68	-48	-77	-57	-41
03	-20	-24	-30	-45	-50	-59	-53	-23	-34	-45	-54	-83	-36	-15	-23	-48	-88	-91	-145	-51	48	19	20	-2
04																								
05																								
06	-38	-71	-87	-40	-12	-37	-40	-32	-38	-63	-79	-99	-69	7	-2	0	11	11	5	4	0	6	7	9
07	10	18	24	19	26	11	20	18	7	10	14	19	18	13	6	18	14	21	24	7	-7	-7	-11	-12
08	-10	-15	-28	-54	-69	-74	-17	4	0	14	23	32	17	29	26	13	24	15	13	6	10	7	2	6
09	5	11	5	1	-1	-1	1	1	0	-1	-1	-1	-5	-1	-4	-5	-2	0	-8	-14	-5	0	4	10
10	14	20	27	32	27	23	19	17	15	10	1	-2	-4	-4	-1	14	35	33	31	20	5	34	44	14
11	18	12	8	1	1	3	3	9	4	1	0	0	-2	2	-1	-4	-5	-8	-8	-7	-10	-11	-12	-15
12	-17	-17	-15	-13	-14	-14	-12	-13	-12	-14	-15	-15	-20	-18	-14	-13	-12	-14	-6	-2	-2	0	-1	-2
13	-8	-2	1	1	3	2	1	0	-1	-1	-2	-4	-3	-2	-8	-4	2	5	7	14	22	13	9	10
14	6	7	11	7	7	8	10	12	10	14	10	8	8	5	6	6	5	3	-1	-5	-6	3	2	-2
15	7	9	9	5	5	4	7	8	7	3	1	-4	-4	-4	-7	-8	-7	-8	-7	-7	-12	-10	-10	-3
16	1	1	-3	4	6	23	20	17	22	10	7	25	-22	-22	-6	-14	-3	5	0	8	9	11	8	9
17	5	11	10	22	20	-9	-34	-8	0	-10	7	-4	7	9	11	17	13	7	7	8	9	12	15	7
18	-6	-17	-30	-34	-26	-27	-35	-1	3	7	2	-7	-17	9	0	-10	-22	-10	10	9	4	8	9	14
19	11	8	12	4	-4	-4	-4	-5	-7	-8	-8	-13	-14	-12	-12	-5	-3	-3	-2	-3	1	0	-3	-7
20	-4	-1	1	-5	-5	-6	-8	-8	-6	-6	-7	-8	-8	-9	-12	-10	-8	-8	-7	-9	-9	-8	-6	-3
21	0	-1	-3	-4	-3	-8	-4	-5	-9	-6	0	-2	1	2	-3	-8	-7	-11	-10	-8	0	4	3	4
22	-2	2	5	1	6	2	1	2	-3	-4	4	3	6	9	7	3	-2	-3	2	2	3	-2	-2	-2
23	-3	-2	0	-8	-5	3	5	8	7	1	5	1	1	2	2	2	-4	-8	-7	-9	-19	-30	-19	-18
24	-11	-7	-13	-13	-13	-29	-34	-40	-52	-41	-40	-33	-21	-23	-17	4	2			-2	2	-1	2	5
25	4	5	8	7	18	18	11	8	11	15	5	-8	-9	-4	1	3	4	2	2	2	2	2	3	3
26	4	5	3	1	1	2	8	6	6	3	4	6	2	4	5	4	5	6	-8	-8	-4	-5	-9	-7
27	-3	12	10	22	39	24	15	9	11	19	23	15	8	-2	7	1	38	4	0	-15	48	-70	-85	-94
28	-24	-48	-8	-23	-38	-94	-51	-11	-17	-38	-52	-43	-69											
29																								
30																			-22	-20	-18	-17	-17	-18
	0	1	3	1	0	0	1	4	4	1	1	-2	-3	0	-1	-3	0	-1	-2	-4	0	1	-1	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-695	-13	-13	-13	-13	-13	-12	-12	-11	-10	-8	-7	-6	-4	-2	2	5	6	7	10	11	11	-671	01
02	-908	-224	-192	-141	-131	-119	-91	-81	-58	-29	-3	4	6	8	10	11	13	15	17	20	21	21	-681	02
03	-981	-292	-230	-187	-172	-155	-116	-87	-62	-51	-45	-38	-31	-23	-16	16	38	76	77	85	86	87	-595	03
04																								04
05																								05
06	-892	-210	-203	-173	-159	-135	-101	-88	-59	-42	-32	-20	2	6	9	11	14	15	16	16	16	16	-684	06
07	-706	-24	-24	-22	-19	-16	-12	-8	4	10	13	16	17	20	21	25	27	31	36	37	38	41	-640	07
08	-779	-97	-97	-95	-91	-84	-68	-53	-18	-7	3	9	13	17	22	31	38	40	41	48	49	49	-633	08
09	-700	-18	-18	-17	-16	-15	-11	-6	-4	-2	-1	0	1	2	4	8	11	14	15	17	18	18	-664	09
10	-695	-13	-12	-10	-9	-7	-5	-3	2	10	15	18	23	30	35	38	39	48	56	73	81	87	-593	10
11	-700	-18	-18	-17	-16	-15	-13	-11	-8	-6	-3	0	1	3	5	12	16	19	21	25	26	27	-651	11
12	-705	-23	-23	-23	-22	-21	-19	-18	-15	-14	-14	-13	-12	-11	-3	-1	1	2	3	4	4	4	-678	12
13	-692	-10	-10	-8	-7	-7	-6	-5	-2	-1	0	1	3	4	9	14	19	22	24	27	27	27	-650	13
14	-692	-10	-10	-9	-8	-7	-4	-2	2	5	6	7	8	9	11	13	14	15	17	18	18	18	-664	14
15	-700	-18	-18	-18	-16	-13	-11	-9	-8	-6	-4	-2	3	5	7	10	11	12	14	15	15	15	-667	15
16	-710	-28	-28	-27	-26	-25	-21	-11	-2	2	5	7	9	11	18	23	27	28	32	35	36	36	-641	16
17	-723	-41	-40	-38	-36	-34	-24	-11	-1	5	7	9	10	12	14	17	20	22	23	25	26	26	-656	17
18	-728	-44	-43	-41	-40	-38	-35	-31	-25	-17	-9	-1	4	7	9	13	15	17	18	20	20	21	-681	18
19	-700	-18	-18	-17	-16	-15	-14	-12	-7	-6	-5	-4	-2	-1	1	8	12	14	15	17	18	18	-664	19
20	-697	-15	-15	-14	-13	-12	-11	-10	-7	-7	-7	-6	-6	-5	-4	-1	1	2	3	5	5	5	-677	20
21	-696	-14	-14	-13	-11	-11	-10	-10	-7	-5	-4	-2	-1	0	1	4	5	6	6	8	8	8	-674	21
22	-688	-8	-8	-8	-8	-8	-5	-3	-2	0	1	2	3	4	6	7	9	11	12	15	15	15	-667	22
23	-716	-34	-34	-34	-33	-31	-22	-18	-10	-7	-4	0	1	2	4	6	7	9	10	11	11	13	-668	23
24	-754	-72	-72	-70	-68	-59	-50	-41	-34	-28	-20	-13	-10	-3	1	4	8	7	10	12	13	13	-669	24
25	-703	-21	-21	-20	-18	-14	-7	-1	2	3	3	4	5	7	9	14	17	23	26	32	33	34	-648	25
26	-699	-17	-18	-15	-13	-10	-9	-7	-3	1	2	3	4	5	8	7	8	9	10	10	10	10	-672	26
27	-856	-174	-172	-147	-136	-125	-98	-64	-9	1	7	11	16	20	24	37	47	52	53	57	58	58	-624	27
28	-837	-155	-155	-148	-137	-123	-100	-82	-57	-50	-45	-39	-31	-20	-14	-7	1	5	9	13	13	13	-689	28
29																								29
30	-705	-23	-23	-23	-23	-23	-22	-21	-20	-19	-18	-17	-17	-17	-16	-18	-18	-15	-15	-15	-15	-15	-697	30
	-981	-210	-184	-121	-98	-80	-48	-27	-12	-7	-3	-682	3	8	10	18	22	31	39	70	77	85	-593	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 10 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - JULY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-13	-18	-25	-29	-29	-31	-35	-35	-32	-23	-24	-20	-23	-30	-48	-53	-71	-77	-127	-93	-99	-47	-24	-64
02	-143	-197	-139	-148	-109	-153	-112	-60	-17	7	24													
03																								
04																			1	-5	13	3	-20	-76
05	-80	-38	-84	-74	-57	-5	8	23	13	-41	-22	13	-14	-55	-89	-89	-30	-82	-38	-159	-54	-98	-151	-29
06	14	12	-20	4	-17	-83	-72	-56	-107	-95	-28	-143	-123	-55	-3	7	1	3	8	18	-63	-100	-160	-177
07	-78	-57	-92	-126	-121	-52	14	12	18	14	12	12	17	18	19	18	14	10	19	24	14	16	17	15
08	13	5	8	6	3	4	10	14	3	5	25	23	12	20	21	16	18	18	13	7	5	0	7	5
09	3	3	9	10	15	10	0	-7	-11	-11	-5	2	12	31	25	40	27	15	13	7	3	-3	-4	1
10	3	7	2	3	1	-3	-9	-14	-16	-20	-26	-20	-17	-17	-20	-11	-4	-5	-4	0	6	3	-10	7
11	8	9	9	13	13	10	6	3	-9	-12	-34	-21	-30	-11	-2	9	8	8	-2	-2	-5	4	1	-1
12	0	-4	-12	5	-3	23	37	36	9	21	25	12	3	15	-27	8	15	22	7	-17	-42	-52	-51	-51
13	-91	-109	-45	-54	-48	-41	-27	-22	-21	-32	-21	-17	-24	-7	9	7	18	10	-14	-28	-25	0	-2	-21
14	-43	-58	-60	-5	-6	3	10	-2	-1	15	16	8	14	18	-36	-19	-47	-120	-159	-52	-22	3	15	3
15	-13	-18	15	12	-60	-84	-88	-51	8	29	35	17	-3	14	8	9	11	9	3	13	18	15	18	15
16	13	7	3	6	3	-1	1	-5	1	8	-8	29	15	8	13	6	4	5	6	12	18	23	23	27
17	8	-28	-48	-120	9	19	-21	-29	22	9	15	21	21	12	1	13	15	-24	2	0	-22	0	-25	-117
18	-24	-54	-86	29	81	36	-15	-37	-40	-49	-64	-54	-2	38	15	5	1	-17	-113	-138	-78	-95	-80	2
19	49	18	28	24	13	11	11	10	12	8	7	5	3	2	1	1	3	-1	-4	-4	0	-1	1	-4
20	-8	-10	-18	-18	-17	-10	-48	-80	-98	-154	-105	-71	-82	-29	16	-1	17	0	-43	-43	-7	-12	-64	-68
21	-153	-152	-148	-143	-110	-72	-154	-212	-136	-38	-43	-66	-109	-132	-81	-40	-7	-3	-25	-11	18	-87	-49	18
22	21	33	34	34	49	52	12	-15	-39	-56	-81	-79	-38	-12	-10	-6	-14	8	9	15	13	10	7	8
23	13	11	12	7	-8	-29	-32	-27	-57	10	28	20	23	19	30	31	19	-3	-9	-2	5	-4	4	-9
24	-8	-3	-18	-23	2	15	13	5	4	35	46	7	-100	-75	-48	56	47	10	29	23	12	22	29	40
25	40	29	27	12	1	-1	0	-2	-5	-10	-12	-8	-8	-3	-10	-5	-4	0	-1	-5	-7	-7	-12	-13
26	-12	-8	-5	2	6	6	5	3	4	3	4	3	1	-1	3	6	-2	-4	-3	2	2	10	5	-1
27	12	4	5	2	3	3	1	4	0	-3	4	8	11	11	10	8	8	14	19	21	18	18	12	
28												-9	-11	-13	-11	-28	-28	-20	-16	-12	-11	16	4	5
29	2	-1	-1	7	15	15	13	-30	-68	23	25	-7	-32	-54	-71	-58					-63	-59	3	15
30	1	6	-7	-26	-72	-30	0	12	26	21	38	31	14	0	4	10	-2	3	-2	3	24	-39	-2	16
31	8	-14	4	17	11	-5	2	8	-16	-13	-88	-103	-59	-3	7	12	-4	-8	5	3	-1	-2	-2	1
	1	-4	-5	3	0	0	1	-4	-8	-3	3	1	-5	-1	1	6	4	1	0	0	1	-1	-2	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-900	-212	-210	-187	-172	-159	-124	-92	-67	-48	-35	-32	-29	-26	-23	-19	-16	-13	-12	-10	-10	-10	-698	01
02	-1225	-537	-448	-345	-317	-291	-221	-194	-165	-145	-131	-117	-85	-58	-18	1	13	24	28	31	33	35	-853	02
03																								03
04	-801	-113	-113	-113	-112	-111	-98	-75	-48	-21	-10	-6	-4	1	11	18	23	26	27	29	30	31	-657	04
05	-1193	-493	-404	-326	-260	-221	-163	-133	-96	-77	-62	-49	-34	-15	2	17	24	32	36	50	51	55	-631	05
06	-999	-299	-272	-243	-228	-211	-180	-147	-108	-87	-63	-50	-11	0	6	17	21	28	53	67	68	82	-600	06
07	-1006	-313	-240	-196	-163	-146	-122	-95	-51	10	12	14	16	17	19	22	24	27	29	33	34	34	-654	07
08	-694	-8	-8	-5	-4	-2	0	2	4	7	8	10	13	15	20	23	25	27	28	29	31	33	-655	08
09	-716	-28	-28	-28	-26	-19	-12	-9	-3	0	3	7	9	13	20	29	36	42	43	43	44	47	-640	09
10	-717	-29	-29	-29	-28	-27	-25	-21	-17	-14	-9	-4	-3	1	4	7	8	10	11	12	12	12	-678	10
11	-733	-45	-45	-41	-38	-34	-31	-24	-8	-3	0	3	5	8	10	12	14	14	14	17	18	18	-670	11
12	-781	-93	-91	-80	-73	-68	-58	-51	-29	-5	1	7	12	15	21	28	35	40	41	44	45	47	-641	12
13	-828	-140	-135	-125	-116	-110	-91	-61	-41	-30	-25	-22	-18	-10	2	9	14	18	20	25	26	27	-660	13
14	-878	-190	-190	-180	-168	-161	-120	-88	-50	-35	-13	-4	1	7	13	18	20	23	24	27	27	27	-660	14
15	-789	-101	-101	-100	-97	-82	-69	-62	-15	-3	6	11	14	16	18	27	33	38	40	44	44	44	-644	15
16	-709	-21	-20	-17	-15	-10	-8	-1	2	4	5	7	10	14	19	27	32	36	38	48	49	50	-638	16
17	-886	-198	-191	-169	-159	-142	-120	-72	-30	-22	-5	3	8	13	16	21	25	28	30	34	35	38	-649	17
18	-954	-284	-200	-154	-149	-141	-124	-103	-74	-59	-47	-33	-18	1	10	39	43	85	90	94	94	94	-583	18
19	-695	-7	-7	-7	-6	-5	-4	-3	-1	2	3	6	8	11	13	24	36	51	58	79	81	82	-606	19
20	-938	-248	-229	-204	-198	-179	-135	-100	-79	-64	-48	-24	-18	-10	-8	5	16	23	25	28	29	31	-657	20
21	-1185	-482	-379	-264	-244	-230	-203	-170	-142	-123	-96	-74	-52	-30	-14	0	17	26	31	35	35	38	-649	21
22	-798	-110	-107	-98	-92	-86	-78	-53	-28	-11	-5	8	11	18	30	44	52	67	79	93	94	95	-593	22
23	-762	-74	-72	-67	-63	-58	-46	-32	-16	-6	0	7	11	15	24	29	33	35	36	38	40	41	-647	23
24	-921	-233	-210	-145	-120	-109	-80	-45	-13	-3	5	11	17	28	38	45	58	85	73	85	86	88	-602	24
25	-704	-16	-16	-16	-15	-14	-13	-12	-9	-6	-5	-3	-2	0	3	26	33	41	45	49	50	50	-632	25
26	-702	-14	-14	-13	-12	-12	-10	-8	-3	-1	1	2	4	5	6	8	10	13	16	19	20	21	-687	26
27	-698	-10	-9	-6	-5	-4	-2	1	3	4	6	7	10	12	15	19	20	22	23	26	26	26	-662	27
28	-720	-32	-32	-32	-31	-31	-29	-27	-22	-18	-13	-12	-11	-9	1	5	7	15	18	20	20	20	-668	28
29	-910	-222	-212	-181	-123	-110	-88	-72	-58	-45	-26	-1	3	11	15	20	26	29	31	33	33	33	-655	29
30	-807	-119	-115	-90	-82	-74	-45	-32	-8	-2	2	5	9	13	18	27	39	43	44	48	48	48	-639	30
31	-808	-120	-120	-118	-114	-108	-97	-56	-14	-7	-3	-1	1	3	7	12	15	18	20	23	23	24	-684	31
	-1225	-389	-285	-202	-177	-151	-111	-74	-38	-17	-8	-888	4	9	14	22	29	40	48	88	91	94	-583	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 11 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - AUGUST 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	2	-8	-8	2	-24	7	3	13	-151	-135	0	33	40	8	0	21	11	3	8	19	28	27	16	-4
02	-33	-37	-16	-26	-32	-14	-4	-8	-24	7	16	21	9	-42	-41	2	11	-2	-22	-9	28	-5	7	7
03	9	7	12	10	9	7	15	13	7	-8	-18	-38	-13	-8	-14	-12	-2	5	3	-1	-1	-9	-26	-11
04	-16	-5	-35	-90	-46	-26	-41	-34	-41	-92	-33	17	27	31	13	1	-7	-21	-22	-15	-10	-8	-5	-4
05	-3	3	3	0	1	3	1	1	-1	-3	-7	-7	-10	-11	-8	-8	-4	-5	-8	-3	1	2	-1	-1
06	1	3	2	-5	-2	-7	-9	-19	-3	-8	-17	-18	-10	-5	-3	-3	3	-5	-11	-13	-17	-26	-23	-20
07	-20	-20	-25	-62	-69	-44	-39	-37	-50	-79	-78	-67	-55	-49	-51	-39	-48	-50	-81	-85	-11	-34	-11	-11
08	-42	-60	-45	-53	-73	-100	-104	-98	-103	-140	-122	-84	-36	19	27	35	33	24	14	-13	-16	-7	-52	-65
09	-60	-19	-19	-40	-43	-74	-42	-27	-68	-54	-49	-10	-5	-8	17	13	-8	22	24	13	-2	30	1	-17
10	-40	-32	-46	-45	-28	-32	-68	-42	0	-2	11	-17	-30	-174	-169	-186	-140	-80	-34	28	48	5	-13	-1
11	0	4	6	9	5	4	10	19	14	12	14	10	12	14	20	35	23	13	2	1	-17	-18	-41	-48
12	-30	-27	-16	-17	-16	-7	-6	-16	-23	-33	-43	-30	-27	-9										
13																								
14																								
15	-7	-12	-7	-8	-7	-8	-13	-7	1	-8	-8	-12	2			-8	-7	-6	-8	-7	-6	-8	-5	-3
16	-31	-21	-3	-3	-4	-68	-62	-39	-72	-52	-30	2	14	3	-21	-105	-128	-79	-31	-35	-40	-38	-25	-51
17	3	5	9	6	18	3	-8	-4	-1	-1	0	1	1	-1	-2	-52	-88	-29	-31	21	22	-10	-9	-1
18	-1	0	0	0	-1	-3	-5	-2	-1	0	-1	-1	-3	-3	-5	-3	-4	-4	-4	-5	-18	-3	11	3
19	12	14	15	14	10	17	8	9	25	23	14	13	16	23	19	22	25	23	18	16	22	18	14	8
20	11	14	15	14	18	18	23	29	18	17	19	15	-5	2	-1	3	4	-1	-1	-5	-2	-12	0	0
21	1	25	-76	-15	-17	-29	-51	-45	-31	-4	-54	0	3	9	15	10	1	-2	11	11	22	30	48	48
22	-4	-3	11	1	-3	-1	5	1	2	5	2	-1	-13	-15	-3	0	9	8	3	5	2	2	2	4
23	4	8	8	8	8	8	7	9	12	7	11	12	12	8	13	21	17	14	2	5	5	19	24	28
24	35	35	38	47	50	32	17	8	-2	-7	-16	-21	-21	-18	-14	-8	-3	-1	1	-1	-3	-7	-11	-13
25	-12	-9	-7	-8	-1	1	-3	-1	3	8	7	10	9	8	9	8	9	3	4	4	1	0	0	4
26	5	8	10	13	12	13	14	12	12	12	11	13	13	12	10	3	0	10	7	19	22	13	15	11
27	12	24	5	11	30	25	23	22	10	5	0	2	8	-1	-6	-2	-3	-5	-18	-50	-65	-40	10	18
28	4	-15	-28	-10	-10	-10	-6	-4	-4	-9	-8	-12	-14	-14	-14	-11	-4	-10	-17	-13	-8	-4	-2	-2
29	0	4	6	8	9	10	11	13	12	11	11	11	11	11	7	7	8	3	4	9	9	9	7	3
30	7	7	7	16	18	15	13	13	10	13	11	11	11	15	18	16	14	11	13	3	1	4	1	1
31	4	1	2	-11	12	24	16	4	25	30	32	28	38	43	38	50	32	34	39	54	21	-43	-101	-100
	0	1	1	-1	0	-1	-2	0	0	-1	-1	1	2	0	0	1	0	0	0	0	1	-2	-1	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-1054	-348	-297	-226	-204	-174	-137	-62	-15	-4	1	5	9	17	23	30	34	43	51	59	60	64	-621	01
02	-752	-81	-80	-54	-51	-49	-44	-37	-29	-18	-13	-7	2	8	10	17	23	32	35	43	45	48	-640	02
03	-740	-49	-48	-43	-42	-39	-29	-20	-12	-8	-5	0	3	6	10	14	16	17	18	19	19	22	-658	03
04	-804	-113	-113	-109	-104	-100	-88	-58	-40	-31	-21	-13	-8	-5	0	19	30	34	38	41	42	42	-649	04
05	-705	-14	-14	-13	-12	-12	-11	-9	-7	-5	-3	-2	-1	1	2	4	5	6	6	8	9	10	-681	05
06	-720	-29	-29	-28	-27	-26	-24	-21	-17	-13	-10	-7	-5	-3	-1	2	4	5	5	7	7	7	-684	06
07	-810	-119	-119	-112	-96	-86	-79	-75	-64	-54	-50	-46	-40	-36	-25	-16	-8	2	4	7	7	8	-683	07
08	-885	-194	-191	-173	-167	-150	-130	-112	-87	-78	-83	-50	-34	-7	19	27	35	37	39	42	43	43	-648	08
09	-802	-111	-110	-101	-94	-82	-74	-58	-45	-39	-27	-13	-7	1	14	23	27	30	32	37	37	37	-650	09
10	-1148	-447	-345	-268	-245	-220	-187	-163	-74	-50	-39	-32	-23	-7	2	16	37	48	48	52	53	53	-638	10
11	-744	-53	-53	-51	-49	-48	-42	-23	-2	3	6	9	12	15	17	22	27	35	41	48	49	50	-641	11
12	-742	-51	-51	-50	-48	-47	-43	-37	-32	-29	-26	-19	-17	-15	-11	-7	-5	-4	-3	-2	-2	-2	-693	12
13																								13
14	-700	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-6	-6	-5	-4	-3	-3	-2	-2	-2	-1	0	-688	14
15	-1075	-378	-298	-222	-186	-141	-114	-83	-44	-32	-20	-11	-8	-7	-6	-2	1	3	6	11	12	14	-675	15
16	-807	-118	-113	-105	-98	-89	-75	-68	-54	-42	-31	-21	-10	-3	3	17	24	28	29	38	39	40	-851	16
17	-708	-17	-17	-13	-10	-9	-8	-7	-4	-3	-1	-1	0	2	4	8	13	18	20	24	25	26	-685	17
18	-731	-40	-38	-23	-20	-18	-7	-6	-4	-3	-2	-2	-1	0	1	2	6	12	13	18	17	18	-673	18
19	-700	-9	-8	-4	2	3	6	9	12	14	15	17	18	21	23	26	27	29	30	32	32	32	-656	19
20	-707	-18	-18	-18	-15	-12	-8	-5	-1	1	4	9	14	18	19	23	28	29	31	35	38	38	-855	20
21	-1060	-380	-292	-220	-163	-121	-87	-50	-35	-14	-1	3	8	12	18	32	44	52	58	66	68	70	-621	21
22	-718	-27	-24	-20	-18	-17	-14	-8	-3	0	1	2	4	5	8	9	12	16	19	21	21	25	-688	22
23	-695	-4	-4	-2	-1	0	2	4	5	6	7	9	11	13	17	22	28	30	32	35	35	36	-651	23
24	-718	-25	-24	-23	-23	-22	-21	-19	-13	-9	-5	-2	1	10	32	43	48	52	58	69	71	72	-619	24
25	-705	-14	-14	-13	-13	-12	-10	-8	-4	0	1	3	5	7	9	10	11	12	12	15	15	15	-673	25
26	-682	-1	-1	-1	-1	0	2	5	9	11	11	12	14	14	15	18	20	24	25	28	29	29	-682	26
27	-789	-98	-97	-90	-78	-68	-56	-35	-7	-3	0	5	10	14	21	26	28	33	34	36	40	41	-650	27
28	-729	-38	-37	-35	-33	-29	-19	-18	-13	-11	-10	-9	-8	-5	-3	-1	0	5	11	17	17	19	-871	28
29	-683	-2	-2	-2	-1	0	2	4	6	7	8	10	10	11	12	12	14	14	15	15	15	16	-674	29
30	-682	-1	-1	-1	-1	0	1	2	8	9	11	12	14	15	16	18	19	21	22	24	24	24	-687	30
31	-954	-261	-244	-208	-188	-143	-97	-52	0	5	15	26	31	35	41	47	52	58	60	69	70	77	-605	31
	-1148	-320	-229	-173	-135	-102	-86	-43	-19	-9	-4	-691	4	9	13	21	29	39	47	59	61	71	-605	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 12 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - SEPTEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-71	-40	-1	52	27	24	8	2	-9	3	4	7	6	7	8	8	3	-2	-2	-2	0	5	1	8
02	4	3	4	7	7	3	3	3	2	2	4	2	2	1	-1	-2	-3	-4	-2	-1	0	0		
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																				-17	-1	17	29	12
12	-20	-28	6	27	28	-20	-103	-110	-101	-148	-202	-123	-23	23	5	18	-14	-29	-82	-153	-148	-75	-128	-154
13	-78	-113	-168	-189	-175	-133	-80	-75	-62	-51	-57	-84	-88	-84	-51	-95	-89	-89	-99	-168	-158	-116	-81	-47
14	-71	-50	-59	-34	-58	-18	-22	-15	-14	-36	-55	-127	-60	-52	-41	-24	-8	-18	-42	-26	-5	-2	-46	-72
15	9	18	7	-8	-52	-35	28	22	17	1	4	-3	-10	1	38	-9	37	20	-59	-80	-80	-94	-79	-90
16	-13	-34	-89	-20	-5	64	37	-80	-101	-57	9	-3	44	94	66	93	54	63	42	3	-25	-101	-12	13
17	8	-68	30	104	34	4	44	94	101	97	95	97	22	29	10	6	10	49	88	-8	-15	-48	-23	-30
18	-64	-120	-103	-83	-108	-81	-27	-41	-10	-59	-103	-89	-103	-77	-92	-86	-161	-52	16	-19	-35	-46	-132	-27
19	-49	-98	-67	-45	-77	-19	-57	-8	17	-1	-52	-87	-12	-88	-81	-29	6	0	1	7	14	13	10	11
20	10	13	6	9	8	16	17	24	22	29	6	9	6	12	-1	-29	-16	-8	-12	11				
21																								
22																				-8	-7	2	-12	-16
23	-18	-4	-2	0	22	0	5	3	-7	-3	6	4	3	7	8	8	9	10	12	12	12	12	6	13
24	13	9	1	-4	-2	-1	-2	4	4	2	1	0	0	3	4	-5	-5	-4	-6	-9	-7	-7	-13	-10
25	3	1	-16	-35	-24	-9	7	2	-4	1	1	2	1	-4	4	2	2	-6	3	7	8	-1	-3	-4
26	-6	-4	0	1	1	-6	-12	-8	-7	18	28	25	14	15	20	19	6	6	11	11	13	21	21	23
27	23	17	15	11	13	11	18	17	14	14	15	12	1	1	11	2	4	0	11	13	10	8	13	9
28	12	4	-3	-1	-5	3	2	-1	-3	-6	-6	-7	-8	-3	3	2	-1	0	5	0	-5	1	-1	2
29	-1	3	-1	-9	-8	-9	-4	-8	-6	-2	1	-3	-22	-30	-11	-4	1	1	-4	4	8	7	10	6
30	3	1	-23	-20	-34	-38	-15	6	4	12	15	13	8	8	7	6	5	2	-2	-4	0	8	9	6
	-3	-4	-2	-3	-4	-5	2	1	-3	1	3	2	1	2	5	1	1	-1	0	-1	-2	1	-3	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-1098	-401	-266	-159	-105	-71	-43	-13	-2	1	2	4	6	7	9	25	37	52	55	67	67	68	-620	01
02	-693	-5	-5	-5	-5	-5	-4	-2	-1	1	2	2	3	3	5	8	7	9	9	9	10	12	-675	02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11	-707	-19	-19	-19	-18	-17	-15	-13	0	7	13	15	17	21	25	33	40	42	44	47	47	47	-641	11
12	-1157	-453	-397	-280	-242	-215	-190	-168	-134	-109	-86	-61	-27	-8	7	25	29	35	38	45	45	45	-638	12
13	-1017	-324	-291	-256	-241	-229	-208	-183	-142	-117	-101	-90	-81	-70	-59	-50	-45	-40	-32	-21	-19	-17	-704	13
14	-1013	-325	-313	-208	-177	-148	-108	-75	-63	-53	-46	-38	-30	-21	-13	-8	-1	7	20	30	30	31	-653	14
15	-871	-183	-162	-142	-137	-126	-101	-89	-68	-34	-12	-4	3	12	22	31	40	44	46	55	55	66	-619	15
16	-885	-197	-195	-182	-188	-148	-115	-94	-53	-28	-12	3	20	41	67	92	95	98	97	100	101	102	-588	16
17	-838	-150	-141	-120	-111	-89	-64	-47	-27	-9	8	26	43	67	95	100	102	105	105	108	108	110	-578	17
18	-1018	-313	-284	-238	-218	-189	-150	-132	-108	-99	-89	-78	-62	-46	-29	-9	9	22	28	35	38	39	-647	18
19	-864	-174	-184	-139	-133	-125	-101	-86	-65	-49	-34	-16	-1	5	10	14	17	20	23	29	30	30	-658	19
20	-727	-39	-39	-38	-36	-32	-22	-15	-4	3	7	9	12	15	19	24	27	31	34	37	37	37	-851	20
21																								21
22	-709	-21	-21	-21	-20	-19	-18	-17	-14	-12	-11	-9	-7	-5	-3	3	5	8	7	7	8	9	-679	22
23	-719	-31	-31	-28	-24	-18	-11	-7	-2	3	6	7	8	11	12	14	18	23	25	30	31	32	-656	23
24	-703	-15	-15	-15	-14	-13	-12	-8	-6	-4	-3	-1	1	2	4	7	10	13	17	21	21	23	-864	24
25	-733	-45	-44	-42	-40	-37	-30	-18	-5	-3	-1	1	2	4	5	7	10	12	13	17	17	17	-668	25
26	-711	-23	-21	-19	-17	-15	-12	-8	-4	0	5	11	14	18	22	24	27	30	31	38	37	37	-651	26
27	-695	-7	-6	-6	-5	-3	0	2	6	9	12	13	13	16	17	19	20	23	24	24	24	24	-680	27
28	-688	-10	-10	-10	-9	-9	-8	-7	-5	-3	-2	0	1	2	4	8	9	13	17	20	21	21	-687	28
29	-728	-40	-40	-37	-35	-31	-23	-12	-8	-6	-4	-1	0	2	5	8	10	11	13	14	14	14	-670	29
30	-732	-44	-44	-42	-40	-39	-35	-27	-8	-1	4	5	7	7	9	12	14	16	17	20	20	20	-668	30
	-1157	-384	-258	-208	-185	-155	-113	-83	-41	-13	-4	-888	3	7	12	21	37	91	98	105	105	107	-578	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 13 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - OCTOBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-1	-2	-1	-5	-3	-2	-3	-4	-7	-9	-7	-9	-8	-10	-11	-11	-9	-11	-10	-3	-9	-17	-11	-16
02	-19	-21	-21	-21	-21	-20	-19	-18	-19	-16	-15	-14	-15	-14	-14	-17	-17	-18	-18	-17	-17	-16	-12	-13
03	-9	-12	-12	-12	-13	-14	-15	-11	-4	1	-2	-7	-4	1	3	-6	-11	-9	-8	-3	2	18	25	24
04	16	7	15	20	15	2	-4	-1	10	2	6	8	12	4	13	16	13	25	20	6	5	16	15	14
05	-3	6	6	21	24	32	29	13	-1	4	-8	-4	-3	-2	0	1	3	2	0	2	5	8	5	6
06	11	14	13	12	11	14	13	13	14	15	14	14	13	9	7	5	2	3	0	-2	2	2	2	4
07	7	8	7	8	4	11	14	13	11	4	4	2	1	3	4	6	7	6	7	10	9	11	10	5
08	5	5	6	9	8	11	11	12	12	8	6	6	4	4	3	6	8	11	11	10	9	8	7	4
09	1	-5	-12	0	-2	-3	6	1	1	-5	-5	-2	-2	-2	-3	1	2	2	3	-3	-7	-7	-9	-4
10	0	-3	-3	-2	2	4	4	4	5	5	5	7	4	1	2	3	5	4	3	-3	0	6	4	4
11	5	8	4	5	1	2	3	2	3	6	3	-2	0	0	-2	-7	-6	-2	-4	-5	1	14	15	11
12	0	2	-3	-4	-3	-4	-4	-6	-4	-4	0	-3	-5	-4	-6	-8	-7	-3	-1	1	1	1	1	0
13	1	2	6	11	8	7	2	7	8	0	-6	-4	0	0	0	-4	-3	-3	0	5	5	6	15	10
14	3	-3	11	-10	-6	1	12	6	-6	-6	-2	9	0	0	-5	-12	-11	-11	-10	-11	-10	-9	-7	-6
15	-5	-8	-6	-8	6	9	6	8	3	5	5	4	6	5	4	7	11	18	13	14	18	15	9	6
16	13	5	2	0	-4	-4	3	9	6	12	15	19	14	8	11	5	6	6	9	2	-1	-2	-3	-5
17	0	-2	-2	0	3	6	1	-3	-6	-5	-4	-5	-3	-1	-2	-5	-7	-5	-4	-7	-6	-3	-4	1
18	-4	5	3	-1	1	-5	0	-1	-4	-6	-5	-6	1	-3	-5	-7	-8	-6	0	4	-4	-4	0	5
19	-1	0	-1	-1	-1	-1	-2	-4	-4	-5	-4	-3	-1	1	5	4	13	17	19	15	8	3	1	1
20	5	11	19	10	8	9	12	10	9	3	2	3	3	4	10	8	14	18	15	17	4	3	3	6
21	3	3	4	5	8	10	8	10	4	0	-1	-1	-1	0	2	1	1	1	1	-3	-2	1	8	8
22	8	9	11	10	9	11	8	4	5	7	7	1	-2	-4	-2	-2	-1	0	-1	-3	-4	-7	-7	-12
23	-18	-17	-17	-18	-15	-15	-15	-13	-15	-14	-9	-1	3	19	-2	1	15	13	21	18	11	-14	-15	-13
24	-12	-12	-12	-10	-7	-7	-7	-6	-7	-8	-7	-7	-6	-8	-6	-5	-3	-2	-2	-2	2	3	1	1
25	1	3	3	3	6	3	3	5	4	-1	-2	1	-1	-3	0	2	5	4	2	7	10	11	13	8
26	6	0	-2	-3	-1	-2	-3	-4	-4	-5	-6	-8	-10	-11	-11	-9	-8	-7	-7	-5	-6	-5	-4	-8
27	-4	2	-9	-9	-8	-5	-2	-6	-7	-8	-7	-9	-8	-6	-7	-8	-8	-11	-12	-13	-11	-10	-8	-3
28	-3	-3	-2	-2	2	-3	-2	-4	-3	-8	-8	-14	-14	-16	-12	-12	-13	-11	-11	-8	-2	-6	-5	-10
29	-12	-13	-14	-14	-15	-14	-13	-12	-10	-11	-11	-11	-10	-11	-9	-6	-5	-9	-10	-10	-5	-4	0	-4
30	-8	-11	-10	-11	-1.	-10	-16	-14	-12	-12	-14	-12	-12	-12	-12	-13	-14	-14	-13	-12	-11	-8	-7	-7
31	-4	-6	-7	-7	-8	-8	-6	-4	-4	2	2	3	4	2	0	-4	-2	-5	-6	-2	1	0	-5	-4
	1	1	0	-1	1	0	2	0	-1	-1	-3	-1	0	0	0	-1	-1	0	0	-1	1	1	1	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-703	-19	-19	-19	-18	-18	-16	-13	-11	-10	-9	-7	-6	-4	-3	-1	0	1	1	3	3	4	-661	01
02	-706	-22	-22	-22	-22	-22	-21	-20	-19	-18	-18	-17	-16	-15	-14	-12	-12	-11	-11	-9	-8	-8	-691	02
03	-699	-15	-15	-15	-15	-14	-14	-13	-12	-10	-9	-5	-3	0	2	15	24	28	32	37	37	38	-646	03
04	-692	-8	-8	-7	-7	-5	-3	1	5	6	8	11	13	15	18	23	25	27	28	32	33	33	-650	04
05	-697	-13	-12	-11	-10	-8	-6	-4	-1	1	2	4	6	7	13	24	34	46	48	54	55	55	-629	05
06	-690	-6	-6	-5	-5	-2	-1	0	3	5	8	10	11	13	14	15	16	16	18	19	19	19	-648	06
07	-694	0	0	0	0	1	1	3	5	5	6	8	8	9	11	13	15	16	17	21	23	24	-660	07
08	-688	-2	-2	-1	-1	0	3	4	5	6	7	7	8	9	11	12	13	14	15	16	18	18	-665	08
09	-688	-14	-14	-14	-13	-12	-9	-8	-5	-4	-3	-2	-1	1	2	3	5	6	8	9	9	10	-671	09
10	-688	-4	-4	-4	-4	-4	-3	-3	1	2	2	3	4	5	5	6	7	8	9	9	11	13	-671	10
11	-693	-9	-9	-8	-8	-8	-7	-4	-2	0	2	3	4	5	6	11	14	17	17	20	20	20	-664	11
12	-694	-10	-10	-10	-10	-9	-8	-7	-4	-4	-3	-3	-1	0	1	2	3	3	3	8	8	8	-675	12
13	-692	-8	-8	-8	-8	-7	-5	-3	-1	0	2	3	4	6	8	10	13	15	17	21	22	23	-661	13
14	-695	-15	-15	-13	-13	-13	-11	-11	-10	-8	-6	-5	-3	0	4	9	12	14	15	16	16	16	-685	14
15	-694	-10	-10	-10	-9	-9	-7	-6	1	4	5	6	8	10	13	16	18	19	22	27	27	28	-656	15
16	-694	-10	-8	-7	-7	-8	-4	-3	-1	2	3	5	6	9	11	15	17	19	22	24	24	24	-660	16
17	-694	-10	-9	-9	-9	-8	-7	-7	-5	-4	-4	-3	-2	-1	1	3	6	7	8	12	12	13	-671	17
18	-694	-10	-9	-9	-9	-9	-8	-8	-5	-4	-4	-3	-1	1	2	5	7	8	9	11	12	13	-671	18
19	-690	-6	-6	-6	-6	-6	-5	-4	-3	-2	-1	0	1	3	8	16	18	20	22	24	24	24	-660	19
20	-684	0	0	0	0	0	1	2	3	4	6	8	10	12	14	17	20	23	24	28	27	29	-654	20
21	-689	-5	-5	-5	-5	-4	-3	-2	-1	0	1	2	4	6	7	9	11	12	13	16	16	16	-668	21
22	-702	-18	-18	-17	-16	-12	-9	-5	-3	-2	0	1	5	7	8	11	12	13	14	18	18	18	-668	22
23	-706	-22	-20	-19	-19	-18	-18	-17	-16	-14	-13	-12	-5	4	12	17	23	25	28	35	38	41	-642	23
24	-699	-15	-15	-15	-14	-13	-12	-11	-8	-7	-7	-6	-5	-3	-1	1	3	4	5	9	9	11	-671	24
25	-698	-5	-5	-5	-5	-4	-2	-1	0	1	2	4	5	6	8	10	12	14	15	16	18	19	-665	25
26	-696	-12	-12	-12	-12	-12	-11	-10	-9	-7	-6	-5	-4	-4	-2	0	2	6	8	12	12	13	-671	26
27	-700	-16	-16	-14	-14	-13	-12	-11	-9	-9	-8	-7	-6	-6	-4	-2	1	3	5	7	8	9	-675	27
28	-709	-24	-19	-18	-18	-17	-15	-13	-12	-10	-9	-8	-4	-3	-2	0	2	3	3	5	5	8	-678	28
29	-699	-15	-15	-15	-15	-15	-15	-14	-13	-12	-11	-10	-9	-8	-6	-3	-2	1	2	2	3	5	-678	29
30	-702	-18	-18	-18	-17	-17	-15	-15	-14	-12	-12	-11	-11	-10	-9	-7	-6	-5	-4	-2	-1	0	-684	30
31	-683	-8	-8	-8	-8	-8	-8	-7	-6	-5	-4	-3	-1	0	1	4	5	8	10	13	14	16	-668	31
	-709	-23	-21	-20	-18	-17	-14	-12	-8	-5	-3	-684	2	5	8	12	15	19	24	44	47	52	-629	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 14 of 15).

Path: CAPE WARWICK to CAPE CRACROFT - NOVEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-4	-3	-3	-2	-4	-5	-5	-6	-5	-5	-3	-2	-2	-2	-2	-3	-3	-4	-5	-4	-4	-3	-2	0
02	1	3	3	3	3	3	3	3	3	5	6	6	8	9	10	10	9	8	6	5	5	5	5	5
03	7	8	8	8	11	11	11	10	8	3	3	4	8	12	14	15	14	11	11	8	5	3	2	3
04	6	9	9	8	12	20	15	16	22	7	13	14	3	5	6	4	4	2	1	1	1	1	1	2
05	4	10	11	12	16	4	-6	4	11	8	14	16	12	8	3	5	5	6	8	3	2	3	-2	1
06	4	6	8	12	19	18	10	11	16	17	12	10	5	9	6	2	6	5	4	2	1	-2	-3	-4
07	0	6	4	0	-12	-11	-9	-13	-10	-15	-11	-11	-12	-12	-13	-12	-1	5	2	-2	-4	-4	-4	-5
08	-5	-4	-1	3	5	6	7	7	7	7	8	4	4	2	4	2	7	13	5	5	5	10	-5	-3
09	-7	-4	-9	-7	-4	4	18	10	12	7	18	29	8	20	2	6	7	8	-3	-4	-4	-4	-3	-4
10	-5	-6	-5	-5	-5	-6	-7	-8	-6	-8	-10	-11	-10	-10	-11	-8	-8	-6	-6	-4	-3	-3	-4	-5
11	-6	-6	-7	-7	-5	-4	-3	-3	-1	-1	-2	-2	-2	-3	-3	-4	-3	-2	-1	0	0	0	0	0
12	-1	-2	-2	-2	-2	-1	0	0	2	2	2	2	0	0	-1	-1	-1	-1	0	1	2	4	4	2
13	2	2	0	0	0	0	-1	0	0	0	0	0	1	1	-1	-2	-4	-4	-3	-3	-3	-1	0	0
14	-1	-1	-1	-2	-2	-1	-2	-2	-3	-1	-1	-1	0	1	1	1	3	0	-2	-3	-4	-3	-2	-2
15	-1	-1	-1	-1	-1	-1	0	0	0	0	2	2	2	2	4	4	2	2	2	2	2	2	2	4
16	4	5	5	5	3	3	3	2	2	1	2	2	4	4	4	4	2	5	1	2	4	2	3	3
17	2	3	5	7	8	8	1	-2	-3	-3	-3	-2	-1	0	8	9	10	10	13	7	0	0	3	5
18	5	1	1	-1	2	4	3	1	1	3	6	3	3	2	12	7	-3	-6	-11	-12	-12	-8	-8	-11
19	-11	-12	-11	-9	-1	-1	1	-2	-3	-8	-8	-5	0	-1	-8	-6	-4	-2	-2	-7	-10	-12	-12	-11
20	-13	-13	-12	-10	-8	-8	-8	-8	-8	-10	-11	-9	-8	-4	-2	-6	-7	-8	-8	-1	1	4	4	5
21	1	0	1	2	3	0	-3	-6	-6	-8	-11	-11	-11	-10	-7	-7	-5	-3	-2	-2	-1	-1	-8	-11
22	-9	-6	-2	-1	-2	-5	-6	-7	-9	-11	-11	-11	-13	-11	-8	-8	-7	-4	1	3	3	3	4	-4
23	-5	-7	-7	-2	-2	-4	-3	-5	-7	-12	-11	-12	-10	-8										
24																								
25																								
26																								
27																								
28																								
29																								
30																								
	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-691	-7	-7	-7	-6	-6	-6	-5	-5	-4	-4	-3	-3	-2	-2	-1	0	1	1	2	2	4	-679	01
02	-685	-1	-1	-1	0	0	4	4	4	4	5	5	5	6	7	9	11	11	12	12	12	12	-668	02
03	-684	0	0	1	1	1	2	3	4	5	7	8	10	12	13	14	15	16	16	19	20	20	-664	03
04	-695	-11	-10	-3	-3	-2	0	1	1	3	4	6	8	10	13	19	22	27	35	50	51	52	-628	04
05	-708	-24	-22	-19	-16	-7	-3	0	3	5	6	6	8	10	12	15	18	22	28	29	33	37	-646	05
06	-692	-8	-8	-6	-5	-4	-3	-2	2	3	5	6	8	11	14	18	23	24	27	33	33	34	-643	06
07	-703	-19	-18	-18	-18	-17	-14	-14	-12	-11	-10	-6	-4	-2	2	5	6	8	9	12	13	13	-668	07
08	-694	-10	-10	-9	-8	-7	-5	-4	-1	2	3	4	5	7	8	11	13	15	16	19	19	20	-680	08
09	-701	-17	-17	-15	-14	-11	-9	-6	-5	-4	-2	1	6	9	14	19	23	31	35	44	45	45	-635	09
10	-686	-12	-12	-12	-12	-12	-10	-10	-9	-7	-8	-8	-5	-4	-4	-2	-1	-1	-1	1	1	1	-682	10
11	-704	-20	-20	-18	-16	-11	-6	-6	-5	-4	-3	-2	-2	-1	-1	0	2	3	4	4	4	4	-680	11
12	-687	-3	-3	-3	-3	-3	-3	-3	-2	-1	-1	0	0	1	2	3	4	4	4	7	7	8	-678	12
13	-689	-5	-5	-5	-5	-5	-3	-2	-2	-1	-1	0	0	1	2	3	3	4	4	4	5	7	-676	13
14	-689	-5	-5	-5	-5	-5	-5	-4	-3	-3	-2	-1	-1	0	0	1	3	4	5	5	7	8	-678	14
15	-686	-2	-2	-2	-2	-2	-2	-1	0	0	1	2	2	3	3	4	4	4	6	8	8	8	-676	15
16	-688	-2	-2	-2	-1	0	0	1	2	2	3	4	4	5	5	8	8	9	9	12	12	15	-668	16
17	-689	-5	-5	-5	-5	-5	-4	-3	-1	1	2	4	5	7	8	11	12	14	15	16	16	16	-664	17
18	-689	-15	-15	-15	-14	-14	-13	-11	-8	-4	0	1	2	3	4	7	9	13	15	19	19	20	-664	18
19	-687	-13	-13	-12	-12	-12	-12	-11	-11	-10	-8	-6	-5	-3	-1	0	1	3	4	5	5	5	-675	19
20	-698	-14	-14	-14	-14	-14	-13	-12	-10	-9	-8	-8	-7	-5	-1	3	5	9	9	9	9	10	-671	20
21	-698	-14	-14	-14	-14	-13	-11	-10	-8	-7	-6	-4	-2	-1	0	2	3	4	5	8	8	8	-675	21
22	-698	-14	-14	-14	-14	-13	-12	-11	-10	-9	-8	-5	-4	-2	1	3	4	5	5	9	9	9	-675	22
23	-697	-13	-13	-13	-13	-13	-13	-12	-10	-8	-7	-6	-4	-4	-3	-1	0	0	0	2	2	2	-682	23
24																								24
25																								25
26																								26
27																								27
28																								28
29																								29
30																								30
	-708	-20	-17	-14	-13	-12	-11	-8	-5	-2	-1	-884	3	4	8	9	13	17	23	37	43	48	-628	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C2 Summary of monthly propagation statistics (Page 15 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - SEPTEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																-18	-11	-12	-10	-5	-5	0	3	2
09	0	-4	-4	6	-4	-15	-24	-7	-1	-4	-4	-16	-7	1	-11	-8	1	11	13	4	1	-12	-10	-10
10	4	14	12	7	4	1	-4	-11	-10	-12	-4	-14	-20	-12	11	-12	-36	-27	-7	-1	-11	-27	2	0
11	-2	0	-2	-4	3	2																-7	9	5
12	-12	-18	-15	-18	-8	-17	-21	-28	-24	-22	-3	-5	-5	-15	-29	-25	-10	-34	-57	-81	-56	-9	-18	-16
13	-23	-30	-18	-8	-6	5	6	9	5	6	8	0	-1	-1	-13	-10	-6	-11	-4	1	10	8	6	10
14	8	7	7	8	9	11	12	12	13	13	13	12	12	9	8	7	9	13	15	16	16	17	15	14
15	12	7	5	6	7	10	13	14	17	18	17	15	12	11	9	9	9	11	14	17	18	19	18	17
16	14	12	7	-1	-6	-7	-4	5	8	8	5	-6	-5	-8	-11	-13	-13	-14	-16	-19	-21	-13	-9	-10
17	-12	-18	-21	-25	-25	-27	-23	-23	-23	-14	-16	-15	-24	-31	-29	-26	-29	-17	-19	-30	-31	-24	-17	-18
18	-17	-19	-22	-29	-24	-20	-20	-21	-21	-29	-20	-12	-9	-18	-56	-39	-35	-23	-29	-19	-19	-19	-15	-21
19	-25	-25	-20	-13	-7	-10	-19	-14	-10	-7	-4	-2	-7	-9	-12	-6	-15	-7	-3	-1	1	3	7	7
20	12	8	6	2	0	0	0	0	0	0	2	4	3	6	4	2	-4	-10	-12	-13	-8	-3	7	17
21	17	13	8	-2	-3	-7	-9	-9	-7	-5	-9	2	-3	-9	-9	-9	-10	-7	-5	-1	-9	1	4	9
22	15	7	3	-9	-6	4	-5	1	2	-2	-11	-9	-5	1	8	4	5	4	3	6	3	-2	0	7
23	11	8	7	6	4	4	3	5	1	4	6	13	11	12	9	0	0	-5	-4	-4	0	1	2	0
24	-5	0	18	-6	-3	-4																		
25																						-2	-4	-4
26	-3	12	7	-4	1	5	2	-1	-1	4	3	8	10	13	26	18	13	-2	-5	-3	-9	-6	-3	3
27	6	10	9	9	10	14	10	6	19	6	-25	-10	0	7	12	15	17	17	16	14	12	13	10	10
28	11	9	9	5	5	12	14	14	12	14	11	11	11	11	11	11	11	13	12	11	13	13	13	11
29	14	18	17	15	29	33	13	-12	-57	-37	-19	-17	-17	-42	-37	-15	-1	-2	3	-3	-8	-13		
30																								
	6	7	6	2	0	1	0	1	1	0	-1	-3	0	1	1	-5	-3	-5	-2	0	-3	-1	3	4

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08	-850	-22	-22	-22	-22	-22	-19	-16	-12	-10	-8	-4	-3	-1	1	3	5	7	9	11	12	13	-815	08
09	-866	-38	-38	-33	-31	-27	-21	-18	-12	-8	-6	-4	-1	2	5	9	13	18	20	24	24	25	-803	09
10	-887	-69	-68	-61	-51	-44	-32	-25	-14	-10	-8	-3	1	4	7	13	15	18	21	24	24	25	-802	10
11	-841	-13	-13	-12	-11	-9	-6	-5	-3	-1	-1	0	1	3	5	8	11	12	13	14	14	14	-814	11
12	-932	-104	-104	-103	-101	-95	-72	-50	-28	-23	-20	-17	-13	-10	-7	-2	0	3	4	6	6	6	-822	12
13	-871	-43	-43	-43	-40	-36	-24	-14	-9	-5	0	1	4	6	9	10	11	12	13	13	13	13	-813	13
14	-822	6	6	6	6	6	7	8	9	10	12	12	13	14	16	16	17	17	17	17	17	19	-809	14
15	-825	3	3	3	3	4	5	6	9	10	12	13	15	17	18	18	19	19	19	21	21	21	-807	15
16	-851	-23	-23	-22	-22	-21	-19	-17	-13	-11	-9	-7	-3	1	7	10	13	14	15	17	17	17	-811	16
17	-863	-35	-35	-35	-35	-34	-32	-29	-28	-26	-24	-23	-21	-19	-16	-14	-12	-10	-9	-6	-6	-6	-834	17
18	-891	-63	-63	-63	-63	-57	-41	-35	-27	-24	-21	-20	-19	-17	-14	-12	-10	-8	-6	-5	-5	-5	-833	18
19	-855	-27	-27	-27	-27	-26	-24	-20	-15	-12	-9	-8	-5	-3	0	3	6	9	10	12	13	13	-815	19
20	-841	-13	-13	-13	-13	-13	-12	-10	-2	-1	0	2	3	4	7	11	13	17	18	19	19	19	-808	20
21	-841	-13	-13	-13	-13	-13	-12	-11	-8	-7	-4	-3	-2	3	5	12	15	18	18	19	19	19	-806	21
22	-847	-19	-19	-19	-18	-17	-13	-9	-3	-1	2	3	4	5	6	9	12	15	17	19	20	21	-807	22
23	-839	-11	-11	-11	-9	-6	-4	-2	0	2	3	4	6	7	9	12	13	14	15	16	16	16	-812	23
24	-851	-23	-23	-23	-23	-22	-20	-12	-8	-5	-2	-1	1	5	13	18	24	26	27	29	29	29	-799	24
25	-834	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-2	-2	-1	0	1	2	2	2	2	2	2	-826	25
26	-843	-15	-15	-15	-14	-12	-9	-7	-3	-1	1	3	5	8	11	18	21	28	29	32	33	34	-794	26
27	-869	-41	-41	-39	-35	-30	-13	-3	6	9	10	11	12	14	15	17	19	20	22	25	26	28	-800	27
28	-827	1	1	2	2	3	5	8	10	11	11	12	12	13	14	15	16	18	18	19	20	20	-808	28
29	-908	-80	-80	-80	-70	-63	-52	-41	-25	-16	-10	-4	1	12	16	23	32	36	39	44	45	45	-783	29
30																								30
	-932	-104	-98	-81	-49	-37	-27	-21	-13	-8	-3	-828	4	7	11	14	17	19	22	36	38	42	-783	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 1 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - OCTOBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01													-21	-27	-28	-34	-33	-31	-33	-34	-28	-28	-28	-31
02	-31	-35	-35	-37	-40	-44	-41	-45	-46	-38	-60	-51	-50	-52	-64	-37	-35	-34	-32	-38	-36	-16	-17	-23
03	-22	-24	-23	-25	-24	-22	-29	-24	-32	-19	-16	-15	-15	-18	-35	-34	-33	-29	-24	-21	-17	-13	-8	-6
04	-5	-6	-10	-12	-14	-13	-13	-11	-7	-3	-1	2	3	2	-1	-4	-8	-10	-9	-8	-3	0	4	6
05	8	5	-1	-2	-5	-7	-7	-5	-2	-2	1	4	3	5	1	-1	-5	-8	-9	-9	-3	0	8	8
06	4	5	10	4	-2	-13	-13	-13	-19	-13	-6	-1	1	2	3	3	0	-3	-6	-7	-4	-1	3	6
07	8	8	8	8	4	1	-4	-5	-4	-1	3	5	7	7	7	7	2	-2	-4	-8	-7	-5	-3	3
08	9	13	12	9	6	-1	-5	-6	-5	-4	0	4	7	6	8	7	6	3	-1	-5	-5	-7	-7	-3
09	-4	2	2	1	0	-4	-4	-5	-12	-13	-2	0	4	7	7	6	5	2	0	-3	-5	-5	-4	-1
10	1	4	4	6	5	5	3	0	-3	-3	-3	-3	0	3	4	6	6	5	5	3	-1	-1	-2	-2
11	0	3	4	4	3	6	-1	-16	-18	-6	-18	-14	-9	-6	-4	2	5	1	0	0	-3	-7	-13	-21
12																								
13	-7	-9	-8	-5	-9	-5	-1	-8	-12	-26	-25	-21	-22	-18	-15	-12	-8	-8	-1	-1	-1	-1	-1	-1
14	-5	-9	-9	-7	-6	-2	-2	-2	4	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	5	5	5	5
15	1	-2	-2	-2	-2	-2	-2	1	4	4	4	4	4	-2	-2	-2	-1	-1	-1	-1	2	8	5	5
16	1	-6	-13	-13	-12	-9	-2	-2	1	4	4	4	4	-2	-2	-2	-3	-6	-5	-2	4	5	5	5
17	5	2	-2	-2	-2	-2	-2	-2	1	4	4	5	5	5	13	12	5	1	-5	-4	1	5	5	-1
18	5	5	6	12	5	5	2	-1	-1	-1	-1	1	5	5	7	5	5	2	-1	-1	-7	14	14	6
19	2	-4	-5	-1	4	5	-1	1	5	5	8	8	5	5	-1	-1	-1	-1	-1	8	5	5	5	5
20	2	1	-1	-6	-8	-7	-5	-1	1	5	5	6	6											
21													13	12	7	4	-2	-5	-1	3	8	2	0	5
22	5	8	8	5	5	-1	-2	-2	-2	-2	1	4	4	6	5	2	5	-1	-4	-8	-8	-4	-1	0
23	8	5	5	5	5	1	0	-2	-2	-5	-1	5	-1	0	-1	8	8	2	-1	-1	-1	-1	-1	1
24	5	5	5	5	5	5	4	-2	-2	-2	-2	1	4	4	4	4	4	4	4	1	3	-3	-1	0
25	3	3	3	3	4	9	3	4	-3	-3	-3	-3	-3	-3	-3	0	0	0	0					
26																								
27																								
28															3	3	3	5	9	10	9	6	5	5
29	8	9	9	9	8	9	9	9	10	9	9	9	6	3	3	3	3	4	7	10	10	10	10	7
30	4	4	4	1	1	0	1	4	4	4	4	4	1	-2	-2	-2	-2	-2	-2	1	4	4	4	4
31	1	0	-1	-5	-6	-2	-2	0	4	5	4	4	1	-2	-9	-9	-9	-9	-2	-13	-14	-9	-8	-5
	4	4	3	2	1	-2	-2	-2	-2	-2	0	3	3	3	1	2	2	-1	-1	-2	-2	-1	2	4

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBw or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-852	-37	-37	-37	-37	-37	-36	-36	-34	-33	-31	-30	-29	-28	-26	-24	-21	-19	-18	-15	-15	-14	-829	01
02	-883	-68	-68	-68	-68	-67	-62	-55	-49	-45	-41	-38	-36	-34	-31	-23	-16	-14	-13	-12	-12	-11	-825	02
03	-858	-43	-43	-41	-39	-38	-35	-33	-28	-25	-23	-22	-19	-17	-14	-11	-7	-5	-4	-3	-2	-2	-817	03
04	-831	-18	-18	-15	-14	-14	-14	-13	-11	-8	-7	-5	-3	-1	2	3	5	7	8	8	8	8	-807	04
05	-828	-13	-13	-12	-12	-10	-9	-7	-6	-4	-2	-1	0	2	4	6	7	8	8	9	9	9	-805	05
06	-839	-24	-24	-23	-21	-19	-15	-13	-8	-5	-3	0	2	3	4	8	8	10	11	13	13	14	-801	06
07	-827	-12	-12	-11	-10	-9	-7	-5	-4	-2	0	3	5	7	7	8	8	9	10	10	11	11	-804	07
08	-825	-10	-10	-10	-9	-9	-7	-6	-5	-3	-1	2	5	7	8	11	12	14	14	16	16	17	-798	08
09	-834	-19	-18	-17	-16	-15	-11	-7	-4	-3	-2	-1	1	2	4	6	7	9	8	9	9	10	-804	09
10	-821	-8	-8	-8	-5	-5	-4	-3	-2	0	2	3	4	5	5	6	7	7	8	8	8	9	-808	10
11	-850	-35	-35	-32	-29	-25	-21	-17	-12	-9	-4	-1	1	2	4	5	6	7	7	9	9	9	-806	11
12																								12
13	-847	-32	-32	-31	-31	-30	-26	-17	-16	-12	-9	-8	-2	-2	-1	-1	-1	-1	0	0	0	0	-815	13
14	-824	-9	-9	-9	-9	-9	-9	-9	-8	-6	-5	-4	-3	-1	4	5	5	5	5	5	5	5	-810	14
15	-817	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	1	2	4	5	6	6	6	6	6	6	-809	15
16	-832	-17	-17	-17	-17	-16	-15	-12	-8	-8	-3	-1	1	3	4	5	5	8	10	11	11	11	-804	16
17	-824	-9	-9	-9	-9	-8	-7	-6	-3	-1	1	4	4	5	5	11	14	16	16	17	19	21	-793	17
18	-824	-9	-9	-9	-9	-9	-8	-6	-3	-1	1	2	3	4	7	11	14	18	18	17	20	22	-792	18
19	-824	-9	-9	-9	-9	-9	-9	-6	-4	-1	0	2	3	5	6	9	10	11	12	12	12	12	-803	19
20	-824	-9	-9	-9	-9	-9	-9	-9	-7	-5	-3	-1	0	2	3	5	7	10	11	12	12	12	-803	20
21	-824	-8	-8	-8	-7	-4	-2	-2	-1	2	4	5	6	7	12	14	15	16	16	19	20	21	-794	21
22	-823	-8	-8	-8	-8	-8	-8	-8	-3	-1	0	3	4	5	5	8	10	11	11	12	12	12	-803	22
23	-824	-9	-9	-8	-8	-6	-2	-2	-2	-1	-1	0	2	4	5	6	6	9	11	12	12	12	-803	23
24	-818	-3	-3	-3	-3	-3	-3	-3	-2	2	3	3	4	4	4	5	5	5	5	5	5	9	-805	24
25	-818	-3	-3	-3	-3	-3	-3	-3	-3	-3	-1	0	1	2	3	4	8	9	10	10	10	10	-805	25
26																								26
27																								27
28	-812	3	3	3	3	3	3	3	3	4	5	8	8	9	9	10	10	10	10	10	10	10	-805	28
29	-812	3	3	3	3	3	3	3	4	5	6	7	9	9	10	10	12	14	14	15	15	16	-799	29
30	-817	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	1	2	3	4	5	8	9	10	10	10	-805	30
31	-832	-17	-17	-17	-17	-17	-10	-10	-8	-8	-5	-2	-1	0	2	3	4	7	8	10	10	10	-805	31
	-883	-68	-68	-53	-43	-37	-28	-18	-8	-3	-2	-815	3	4	5	8	10	12	15	17	17	19	-792	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBw (or dB)

Table C3 Summary of monthly propagation statistics (Page 2 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - NOVEMBER 1986

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-8	-10	-14	-19	-19	-19	-14	-14	-14	-18	-8	-6	-11	-14	-19	-22	-26	-18	-14	-10	-6	-6	-3	0
02	0	3	0	0	-1	-5	-4	-1	2	6	11	11	8	6	5	1	-1	-1	-1	-1	5	5	8	11
03	8	5	5	1	-1	-1	-1	-1	5	5	11	11	11	8	5	1	-1	-1	-4	-1	-1	6	6	8
04	11	11	7	6	0	-1	-1	-1	4	5	11	11	13	12	11	7	5	1	-1	-1	1	5	8	11
05	13	11	11	11	5	2	-4	-4	-4	2	6	11	11	11	11	11	5	2	-1	0	0	0	6	8
06	11	11	8	6	2	-1	-4	-5	-7	-7	-4	0	8	12	12	12	8	6	0	0	0	0	0	0
07	8	8	7	7	7	2	0	0	-3	0	1	1	4	3	2	1	1	1	-3	-6	-6	-6	-6	-6
08	0	0	0	6	6	6	6	6	6	5	5	5	8	11	11	11	8	7	5	2	4	1	1	2
09	2	5	5	11	11	11	11	13	5	5	2	-1	-4	-1	1	0	0	-4	-7	-7	-7	-6	-6	-6
10	-10	-10	-6	-4	1	1	1	-4	-6	-10	-6	-6	-6	-6	-6	-6	-3	1	1	1	1	1	-3	-3
11	-6	-6	-6	-3	-3	1	3	3	3	1	1	1	-3	1	-4	-5	1	1	1	1	1	1	-3	1
12	-3	-6	-6	-6	-6	-3	0	3	7	2	3	3	0	-4	-4	-4	0	0	1	6	6	6	5	5
13	-1	-1	-1	-1	-1	-1	2	5	5	5	5	5	2	-1	-1	-1	-1	-1	-1	2	5	5	5	5
14	1	-2	-2	-2	-5	-5	-2	-5	-2	5	6	4	1	-2	-5	-5	-5	-2	-5	-7	-1	-1	1	5
15	5	4	0	-2	-8	-8	-8	-6	5	4	4	4	4	1					-2	0	4	4	5	7
16	4	1	-8	-6	-8	-12	-8	-8	-2	1	4	6	8	3	-2	-5	-12	-12	-12	-8	-6	-2	4	1
17	-2	-8	-8	-8	-8	-12	-14	-12	-8	-2	0	1	1	0	-5	-5	-6	-7	-5	-5	-2	-1	4	7
18	6	4	4	1	-5	-8	-8	-7	-5	-2	-2	1	5	1	-2	-2	-5	-7	-7	-7	-5	-2	-2	0
19	1	4	1	-2	-6	-8	-8	-13	-14	-7	2	0	4	1	1	-2	-5	-8	-8	-8	-5	-2	-2	1
20	4	6	4	4	-2	-2	-5	-6	-6	-2	-2	4												
21														7	8	2	3	3	-2	-2	-3	-2	3	8
22	2	1	-6	-8	-3	13	2	1	4	5	2	4	10	11	11	16	16	11	12	10	7	7	7	7
23	10	9	8	6	4	1	4	6	4	4	4	6	6	9	11	10	7	1	-2	-2	4	4	-2	-2
24	-1	2	10	12	10	10	8	-2	-2	0	1	0	1	-2	1	4	6	10	10	4	4	0	0	1
25	1	4	4	10	10	10	5	4	5	5	5	6	8	13	15	4	1	2	-6	-15	-15	-11	-15	-12
26	-6	-6	-12	-20	-27	-25	-26	-36	-34	-23	-31	-33	-48	-42	-36	-16	-27	-31	-45	-49	-62	-49	-37	-31
27	-37	-51	-12	2	9	12	-1	-8	-36	-37	-16	-6	-5	-1	-7	-8	-8	-5	-5	-5	-8	-15	-13	-13
28	-15	-15	-15	-15	-12	-7	-7	-8	-1	-1	-4	-7	-7	-7	-7	-7	-11	-14	-14	-14	-10	-7	0	-12
29	-12	-11	-11	-11	-4	-9	-7	-7	5	-20	-40	-32	-7	-13	-12	-22	-21	-19	-7	-26	-18	-7	-8	-26
30	-20	-14	-7	-10	-5	-15	-8	-21	6	-10	-7	-8	-3	2	-5	-10	-14	-17	-21	-18	-24	-25	-23	-32
	2	2	0	0	-1	-1	-1	-2	1	1	2	3	4	3	1	-1	-1	-1	-2	-2	-1	0	1	2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-840	-30	-30	-30	-29	-29	-27	-23	-21	-19	-17	-15	-13	-11	-8	-6	0	1	1	1	1	1	-809	01
02	-817	-7	-7	-7	-7	-7	-8	-5	-3	-1	0	2	4	7	8	10	10	11	11	15	15	16	-790	02
03	-817	-7	-7	-7	-7	-7	-6	-5	-4	-2	0	2	5	6	8	9	10	11	11	11	11	11	-794	03
04	-811	-1	-1	-1	-1	-1	-1	-1	-1	0	4	6	7	8	9	11	13	15	15	16	16	16	-789	04
05	-817	-7	-7	-7	-7	-6	-5	-3	-1	1	3	5	7	8	9	10	12	14	15	16	16	16	-794	05
06	-817	-7	-7	-7	-7	-7	-6	-3	-1	0	5	6	7	11	11	12	12	12	16	17	17	17	-793	06
07	-816	-6	-6	-6	-6	-6	-6	-6	-5	-2	0	1	1	6	6	7	7	8	10	12	12	12	-798	07
08	-811	-1	-1	-1	-1	-1	-1	0	2	4	5	6	8	7	9	10	11	12	12	15	15	16	-794	08
09	-817	-7	-7	-7	-7	-7	-7	-7	-6	-3	-1	0	4	6	7	10	12	14	15	16	16	16	-794	09
10	-824	-14	-14	-14	-14	-14	-13	-12	-11	-9	-7	0	0	0	1	1	1	1	1	1	1	1	-809	10
11	-816	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-3	-2	-1	0	2	5	6	7	8	8	8	-802	11
12	-817	-7	-7	-7	-7	-7	-7	-8	-5	-4	-2	0	2	5	8	8	7	7	7	7	7	7	-803	12
13	-811	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	1	2	4	5	6	7	8	11	11	11	-799	13
14	-818	-8	-8	-8	-8	-8	-7	-6	-5	-4	-3	-2	-1	1	4	5	7	10	11	11	11	11	-799	14
15	-818	-8	-8	-8	-8	-8	-8	-8	-6	-2	-1	1	2	3	4	6	8	9	10	10	10	10	-800	15
16	-825	-15	-15	-15	-15	-15	-14	-13	-11	-9	-7	-4	-2	0	2	5	8	9	11	15	15	15	-795	16
17	-825	-15	-15	-15	-15	-15	-14	-13	-11	-9	-7	-5	-4	-2	0	2	4	7	8	10	10	10	-800	17
18	-818	-8	-8	-8	-8	-8	-8	-8	-7	-6	-4	-3	-1	1	4	5	5	8	9	10	10	10	-600	18
19	-825	-15	-15	-15	-15	-15	-14	-13	-10	-8	-6	-4	-2	-1	1	3	3	4	4	9	10	10	-800	19
20	-818	-8	-8	-8	-8	-8	-8	-7	-6	-5	-4	-3	-1	1	2	4	7	9	9	10	10	10	-800	20
21	-818	-8	-8	-8	-8	-8	-7	-5	-3	-1	0	2	3	6	8	10	10	10	12	14	15	15	-795	21
22	-824	-14	-14	-13	-12	-11	-7	-4	0	2	5	9	9	10	12	15	17	18	19	22	22	22	-788	22
23	-812	-2	-2	-2	-2	-2	-2	-2	-1	1	2	4	5	7	8	9	10	12	13	14	14	14	-796	23
24	-812	-2	-2	-2	-2	-2	-2	-2	-1	0	1	2	4	5	7	9	11	13	13	14	14	14	-796	24
25	-825	-15	-15	-15	-15	-15	-15	-14	-8	-1	1	3	5	7	8	11	14	16	17	20	21	22	-788	25
26	-879	-89	-89	-87	-86	-82	-53	-48	-43	-38	-35	-32	-29	-25	-19	-11	-8	-3	-3	-2	-2	-2	-812	26
27	-873	-63	-63	-62	-59	-53	-44	-37	-21	-14	-11	-8	-6	-4	-2	5	10	13	14	18	18	19	-791	27
28	-825	-15	-15	-15	-15	-15	-15	-15	-15	-14	-8	-8	-7	-7	-6	-2	-1	0	0	5	5	6	-804	28
29	-873	-63	-61	-52	-47	-42	-34	-26	-22	-15	-13	-8	-8	-7	-7	-1	1	4	5	10	11	11	-799	29
30	-855	-45	-45	-43	-41	-37	-33	-29	-22	-19	-15	-12	-10	-7	-4	2	8	7	9	11	13	15	-794	30
	-879	-89	-89	-87	-86	-82	-53	-48	-43	-38	-35	-810	2	4	8	10	11	13	15	18	21	22	-788	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 3 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - DECEMBER 1986

	RELATIVE HOURLY MEDIAN (dB)																					
DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-7	-1	-7	-7	-4	-8	-8	-4	0	8	8	2	2	-4	-1	-4	-4	-3	-7	-11	-10	-11	-4	2
02	7	0	-2	-2	-4	-4	-4	-14	-23	-27	-8	-2	2	-3	-7	-4	2	-4	-5	-9	-9	-5	-2	4
03	5	1	1	-3	-2	2	-1	4	5	9	8	7	-7	0	4	5	4	7	7	-2	-3	3	9	7
04	5	8	10	7	7	7	3	1	3	3	4	7	11	17	23	17	9	5	5	4	0	1	5	14
05	13	21	24	22	8	11	7	1	-3	2	5	17	14	9	8	10	5	1	4	1	1	4	7	4
06	8	7	13	14	13	7	4	1	1	1	3	7	8	13	13	10	3	-2	-2	-4	-5	-5	-5	-5
07	2	9	13	12	10	9	5	4	3	4	3	4	9	12	8	12	8	7	-4	-9	-5	-2	-3	-1
08	0	-3	-6	-1	-5	-7	-6	-13	-8	-7	-10	-15	-12	-3	9	-8	-7	-5	-3	-3	2	-2	-3	-4
09	-2	-2	-2	5	1	3	4	4	1	4	3	1	1	1	2	4	7	7	9	9	4	-3	-5	-8
10	-8	-5	1	5	4	4	3	5	-3	-5	-8	-5	-3	-3	-5	-2	-4	3	-4	-5	-2	-3	-5	-5
11	-5	-4	-3	-2	-3	1	-4	-9	-2	5	9	-1	4	4	3	4	10	11	4	-4	-2	3	2	0
12	3	2	2	3	2	-4	4	8	8	8	7	4	3	1	4	1	3	4	7	7	7	8	7	4
13	4	2	4	1	1	1	4	5	8	9	8	8	4	4	3	2	2	2	3	5	9	12	12	10
14	8	2	-1	2	2	3	-2	-1	5	14	8	-6	-9	-5	-4	9	1	-1	8	5	12	13	11	9
15	8	4	0	0	-1	-4	-4	-1	5	5	7	9	9	4	2	-1	-1	2	2	7	9	13	14	14
16	12	10	3	2	-1	-1	-1	2	8	-4	-8	-37	-26	-22	-15	-11	-12	-5	-5	-5	-8	-3	-3	0
17	3	1	4	5	1	-3	-5	-5	-5	-5	1	5	5	5	3	2	-1	-4	-4	-4	-1	2	2	8
18	7	4	-4	-8	-8	-8	-10	-11	-8	-2	2	9	9	9	4	1	-2	-4	-5	-8	-8	-2	1	7
19	7	7	7	4	1	-2	-5	-5	-5	-5	-9	-5	1	-3	-14	-11	-12	-16	-12	-9	-5	-5	-2	1
20	3	11	7	7	7	3	1	1	1	1	3	7	9	12	12	9	7	4	1	1	1	-2	-3	1
21	4	7	4	3	-1	-4	-4	-4	-7	-8	-8	-8	-8	-4	-4	-1	-1	-4	-5	-5	-8	-5	-5	-8
22	-5	-8	-8	-8	-8	-8	-15	-11	-11	-11	-11	-11	-11	-8	-9	-10	-12	-11	-11	-5	-5	-5	-5	-7
23	-11	-4	4	4	8	13	11	12	7	2	-5	-2	-5	0	5	17	-1	2	-5	-5	-5	-9	-12	-12
24	-12	-12	-12	-12	-12	-12	-15	-9	-14	-11	-11	-8	-5	-6	-4	-10	-14	-14	-7	-8	-11	-11	-14	-15
25	-8	-6	-3	0	-3	-8	5	-10	-15	-17	-23	-19	-15	-11	-19	-19	-21	-23	-19	-19	-17	-17	-11	-11
26	-11	-10	-11	-17	-18	-19	-19	-19	-15	-9	-5	-3	-2	-3	-7	-9	-11	-11	-9	-15	-10	-15	-11	0
27	-5	-23	-36	-38	-19	-43	-33	-29	-24	-10	-10	-7	-3	-4	-3	-3	-7	-2	4	7	4	4	4	1
28	-2	-5	-5	-5	-3	1	1	4	3	2	2	-1	-1	-4	-2	-2	-1	-2	2	2	2	-1	2	2
29	2	-4	-4	-4	-8	-4	-4	-4	-8	-7	-3	-4	-9	-20	-19	-12	-15	-16	-15	-15	-10	-13	-21	-20
30	-21	-17	-13	-16	-7	-6	-8	-11	-15	-12	4	14	-32	-12	-2	-2	-5	-5	-3	5	19	-12	-7	-16
31	-8	-12	-8	-10	-5	-5	-5	1	2	3	2	4	2	1	1	-2	-5	-9	-5	-5	1	1	5	4
	2	1	1	1	-1	-2	-2	-3	-2	-1	1	1	0	0	1	1	0	0	-3	-4	-2	-2	-1	1

	ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:																						
DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-832	-19	-19	-19	-18	-17	-14	-11	-9	-8	-7	-5	-4	-2	1	4	6	7	8	8	11	13	-799	01
02	-841	-28	-28	-28	-28	-28	-23	-12	-8	-5	-4	-4	-3	1	2	5	8	13	14	14	14	15	-794	02
03	-824	-11	-11	-11	-10	-9	-6	-4	-2	0	2	3	4	6	7	10	11	12	12	15	16	17	-796	03
04	-818	-5	-5	-5	-5	-4	-3	0	2	3	4	6	7	11	13	16	20	23	24	28	29	29	-784	04
05	-825	-12	-12	-9	-7	-5	-4	-2	1	3	4	6	12	13	15	20	23	26	28	31	32	33	-780	05
06	-818	-5	-5	-5	-5	-5	-5	-5	-4	-2	0	3	5	8	10	12	13	16	17	18	18	18	-795	06
07	-824	-11	-11	-11	-11	-10	-8	-5	-2	2	3	5	7	8	10	11	13	15	16	17	17	19	-792	07
08	-839	-26	-26	-25	-23	-20	-16	-13	-10	-7	-5	-4	-3	-1	1	2	6	11	14	19	20	21	-792	08
09	-824	-11	-11	-11	-11	-10	-8	-5	-3	-2	0	2	3	4	6	7	9	11	11	12	12	13	-796	09
10	-824	-11	-11	-11	-11	-11	-10	-10	-8	-6	-5	-3	-2	0	2	5	6	9	11	12	12	12	-800	10
11	-824	-11	-11	-11	-11	-11	-9	-7	-3	-2	-1	1	3	4	6	9	11	14	15	17	17	17	-796	11
12	-817	-4	-4	-4	-4	-4	-3	0	2	2	3	4	5	6	7	9	11	12	12	16	16	17	-796	12
13	-812	1	1	1	1	1	1	1	2	2	4	5	6	7	8	10	11	12	12	14	15	16	-797	13
14	-831	-18	-18	-17	-16	-13	-10	-8	-3	-1	1	3	5	8	10	13	15	16	16	20	20	20	-793	14
15	-817	-4	-4	-4	-4	-4	-4	-3	-2	0	2	3	5	7	9	12	16	17	17	17	17	20	-792	15
16	-861	-48	-48	-45	-42	-38	-27	-22	-11	-9	-7	-3	0	1	2	9	11	14	16	17	17	17	-792	16
17	-818	-5	-5	-5	-5	-5	-5	-5	-4	-2	1	1	2	3	7	8	8	8	10	13	13	13	-800	17
18	-833	-20	-20	-18	-16	-12	-11	-10	-9	-7	-5	-3	-1	2	6	9	11	12	12	13	13	13	-795	18
19	-833	-20	-20	-20	-19	-19	-17	-14	-11	-9	-8	-6	-4	-2	1	4	6	7	9	12	12	13	-773	19
20	-818	-5	-5	-5	-5	-5	-4	-4	-2	-1	0	2	4	5	7	10	11	12	13	13	13	13	-800	20
21	-824	-11	-11	-11	-11	-11	-10	-8	-6	-5	-5	-4	-4	1	2	4	5	6	7	7	7	7	-806	21
22	-831	-18	-18	-18	-18	-18	-17	-16	-14	-13	-11	-8	-5	-5	-4	-4	-3	-1	0	1	2	2	-811	22
23	-825	-12	-12	-12	-12	-12	-12	-11	-8	-6	-3	-1	2	5	9	13	15	17	18	21	22	22	-791	23
24	-832	-19	-19	-19	-19	-19	-17	-15	-12	-12	-11	-11	-10	-7	-5	-4	-4	1	2	2	2	2	-811	24
25	-840	-27	-27	-27	-27	-27	-26	-24	-21	-18	-16	-15	-13	-11	-5	1	3	9	14	20	21	21	-792	25
26	-839	-28	-28	-28	-25	-25	-23	-21	-17	-15	-13	-11	-9	-7	-6	-2	0	4	5	7	7	7	-808	26
27	-871	-58	-57	-53	-48	-44	-40	-36	-28	-18	-10	-7	-4	-1	2	5	6	7	8	12	13	13	-800	27
28	-818	-5	-5	-5	-5	-5	-5	-5	-4	-1	1	1	1	2	2	2	5	7	7	8	8	8	-794	28
29	-840	-27	-27	-27	-27	-25	-21	-18	-17	-13	-10	-5	-5	-4	-4	1	2	2	2	2	2	2	-811	29
30	-863	-50	-50	-48	-43	-33	-25	-19	-15	-12	-11	-8	-8	-3	0	6	14	21	22	28	29	30	-783	30
31	-825	-12	-12	-12	-12	-12	-12	-11	-8	-7	-5	-3	-1	1	3	5	6	7	8	12	12	12	-773	31
	-871	-58	-43	-34	-27	-20	-16	-12	-8	-5	-3	-813	1	4	6	10	12	17	18	28	28	29	-773	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 4 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - JANUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	7	1	-3	-2	4	11	8	3	3	9	13	13	13	10	9	7	2	1	-3	-6	-6	1	7	7
02	4	-4	-4	4	-2	-6	-3	-6	-5	-4	-2	-2	2	3	-2	1	-5	-4	-2	-2	2	-2	2	5
03	5	6	2	2	-2	-2	-2	2	2	-2	-5	-1	5	15	3	-7	-14	-3	10	16	12	3	-8	-18
04	-20	-24	-24	-20	-21	-13	-11	1	-2	-3	-11	-11	-27	-11	-26	-26	-25	-38	-28	1	8	8	11	14
05	2	-2	2	-2	-4	-5	-5	3	8	8	10	5	6	-5	-6	-15	-30	-24	-24	-15	-5	-4	-5	-7
06	-17	-17	-10	-17	-13	-9	-16	-13	-8	-11	-5	-12	-23	-28	-36	-28	-22	-32	-47	-66	-86	-80	-73	-83
07	-67	-55	-41	-24	-27	-28	-19	-14	-11	-35	-14	-8	-9	1	1	-2	1	-3	-1	-2	-2	2	2	-2
08	-5	-2	-3	-2	-4	-4	2	-1	-1	-2	-3	-4	-4	-4	-2	-1	-1	3	4	4	2	3	6	11
09	10	10	19	18	7	3	-8	-5	-6	2	4	-3	-1	-2	-2	-1	-5	-9	-5	1	-4	-10	-18	-17
10	-19	-15	-18	-16	-13	-10	-4	-6	-6	-3	-3	-6	-10	-12	-6	1	1	1	1	1	1	2	1	-3
11	2	2	-4	-3	1	1	3	7	8	7	7	7	4	7	3	4	7	7	7	8	10	11	9	8
12	5	4	4	5	5	5	8	11	14	14	14	14	14	10	8	8	8	8	8	8	11	8	8	8
13	8	8	8	2	2	8	8	8	8	8	8	9	0	-10	-11	-11	-10	-8	-2	-3	-5	-9	-13	-24
14	-28	-19	-18	-15	-4	-5	-5	-10	-13	-13	-13	-13	-13	-10	-4	1	-3	-6	-5	-5	-6	-12	-18	-21
15	-18	-17	-10	-4	-3	-6	-6	-4	-15	-18	-24	-27	-29	-28	-22	-21	-14	-22	-26	-29	-33	-41	-38	-34
16	-35	-14	-11	-23	-3	-4	-14	-12	-1	-4	-9	-15	-26	-17	-10	-10	-2	1	0	-2	-12	0	-5	-6
17	-21	-4	-8	0	-1	-2	-2	-2	-2	-4	-5	-12	-9	-15	-13	-18	-10	-5	-5	-3	-4	-3	-5	-8
18	-9	-12																						
19																					1	1	3	7
20	10	13	13	13	13	7	7	7	4	4	4	7	10	13	13	13	10	8	4	2	2	2	2	5
21	9	10	13	13	13	10	8	4	-2	-2	-3	2	5	8	8	8	3	2	-1	2	-2	-2	-3	-5
22	-5	-5	-2	2	-2	-2	-5	-5	-5	-9	-8	-8	-7	-8	-5	-5	-6	-3	-3	2	1	1	-2	-3
23	-5	-5	-5	-9	-9	-9	-8	-8	-5	-2	-5	-2	-1	1	3	7	4	7	2	1	1	1	1	1
24																								
25																								
26																								
27																								
28																								
29																								
30																								
31																								
	-5	-5	-3	1	0	0	-1	1	0	1	-1	-3	0	-3	-1	-1	-1	-2	-1	1	-1	1	1	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-825	-6	-6	-6	-6	-6	-6	-4	-2	0	2	4	6	8	10	12	12	13	16	19	21	23	-798	01
02	-825	-8	-8	-8	-8	-8	-8	-8	-5	-3	-2	0	1	2	2	5	7	8	8	10	12	13	-808	02
03	-839	-20	-20	-20	-19	-18	-16	-10	-5	-3	-2	0	2	7	8	13	16	19	22	23	23	24	-792	03
04	-861	-42	-42	-42	-42	-40	-34	-30	-25	-23	-19	-14	-10	-4	3	8	12	15	17	18	19	21	-797	04
05	-852	-33	-33	-33	-32	-31	-27	-23	-11	-8	-6	1	1	2	7	8	11	13	14	18	18	18	-801	05
06	-920	-101	-101	-99	-97	-95	-89	-80	-58	-33	-22	-20	-14	-13	-8	-5	-5	-3	-1	1	1	1	-818	06
07	-915	-96	-96	-95	-89	-69	-57	-46	-27	-20	-12	-7	-4	-2	0	1	2	5	7	8	8	8	-811	07
08	-824	-5	-5	-5	-5	-5	-5	-5	-4	-3	-2	-1	0	1	3	6	8	11	12	16	16	17	-802	08
09	-840	-21	-21	-21	-21	-19	-16	-12	-9	-6	1	1	2	6	8	13	18	22	24	28	29	30	-789	09
10	-840	-21	-21	-21	-21	-21	-20	-18	-13	-9	-6	-5	-3	-2	0	1	4	6	6	7	7	12	-808	10
11	-825	-6	-6	-6	-6	-6	-5	-3	1	2	3	4	5	7	8	13	14	14	14	14	14	14	-805	11
12	-817	2	2	2	2	2	2	3	4	5	6	7	8	10	12	14	16	18	19	20	20	20	-799	12
13	-847	-28	-28	-28	-27	-25	-20	-13	-10	-7	-2	1	7	7	8	8	8	11	13	14	14	14	-805	13
14	-847	-28	-28	-28	-28	-28	-22	-19	-14	-13	-13	-11	-7	-5	-4	-2	0	1	1	5	6	7	-812	14
15	-873	-54	-54	-52	-48	-43	-37	-35	-31	-27	-25	-21	-14	-13	-9	-4	-1	0	1	1	1	1	-818	15
16	-872	-53	-52	-48	-42	-38	-28	-21	-17	-12	-8	-6	-5	-1	1	2	7	8	8	11	12	13	-808	16
17	-845	-26	-26	-25	-25	-23	-12	-12	-11	-10	-8	-6	-5	-3	-1	1	3	6	7	11	12	13	-806	17
18	-831	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-9	-8	-7	-6	-6	-5	-5	-5	-5	-5	-824	18
19	-818	1	1	1	1	1	1	1	1	1	1	2	3	4	5	6	7	7	8	12	13	13	-806	19
20	-818	1	1	1	1	1	1	2	2	4	6	7	8	10	11	12	13	13	16	18	18	18	-801	20
21	-824	-5	-5	-5	-5	-5	-5	-4	-3	-1	1	3	5	7	9	11	12	13	13	17	17	18	-801	21
22	-831	-12	-12	-12	-12	-11	-11	-10	-9	-7	-6	-4	-2	1	1	2	2	4	6	7	7	7	-812	22
23	-831	-12	-12	-12	-12	-12	-11	-10	-9	-7	-5	-3	-2	0	1	4	6	6	7	9	11	13	-806	23
24																								24
25																								25
26																								26
27																								27
28																								28
29																								29
30																								30
31																								31
	-920	-101	-95	-81	-81	-38	-27	-20	-10	-6	-4	-819	1	2	7	8	12	14	18	23	24	27	-789	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 5 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - FEBRUARY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-5	1	1	-4	-9	-9	-9	-9	-9	-9	-4	1	1	5	4	1	-5	-15	-15	-7	-7	-5	-5	2
02	-5	-6	-8	-15	-8	-8	-17	-18	-17	-17	-12	-9	-4	1	2	2	1	5	-4	-9	-9	-9	-9	-4
03	-4	-4	-9	-9	-9	-8	-14	-8	-8	-14	-20	-11	-4	-13	-18	-27	-20	-27	-20	-9	-13	-2	8	-8
04	-16	-30	-43	-43	-30	-27	-19	-5	0	8	10	4	-5	-5	-7	-7	0	-7	2	8	6	4	-6	-5
05	-14	-15	-20	-30	-30	-15	1	-12	-14	-14	-4	-1	-13	-8	4	20	-3	-13	-2	4	-2	-5	-4	1
06	3	6	12	16	16	16	16	12	10	9	5	9	5	5	4	5	9	10	10	10	6	2	1	-4
07	-4	-8	-5	1	1	5	4	1	-4	-4	-4	-4	-8	-9	-9	-9	-5	-4	-8	-5	-9	-9	-9	-15
08	-9	0	-7	-6	-5	-8	-9	-6	0	-5	-6	-8	-8	-5	-5	-4	0	-4	1	1	-5	-9	-7	-7
09	-4	0	-5	-5	0	-5	-9	-9	-15	-15	-15	-9	-9	-5	-5	1	1	5	-4	-14	-15	-14	-8	-5
10	7	9	5	2	1	-4	1	-4	-4	-4	-3	5	3	4	1	1	4	4	5	13	12	16	12	11
11	9	9	5	4	-4	1	-9	-9	-14	-14	-15	-9	-6	-4	1	1	1	-2	4	1	-1	5	1	-3
12	1	4	5	7	20	23	14	13	-1	-17	-20	-14	-6	-4	-8	-3	-8	-8	-8	-8	-15	-14	-4	-4
13	-3	2	2	-5	-8	-8	-8	-8	-3	-3	2	2	-5	-4	-18	-15	-25	-14	-19	-27	-27	-27	-29	-32
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								
	-3	1	1	0	-2	-4	-8	-5	-3	-7	0	0	0	0	0	0	0	-5	-4	-5	-7	-6	-4	-4

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-838	-20	-20	-20	-20	-19	-18	-17	-14	-10	-7	-6	-4	-2	0	4	8	9	9	9	15	16	-802	01
02	-853	-35	-35	-34	-33	-31	-25	-19	-16	-13	-11	-8	-5	-3	-1	5	8	9	9	18	18	18	-802	02
03	-853	-35	-35	-35	-34	-34	-31	-28	-21	-16	-12	-9	-8	-8	-4	-1	4	9	9	9	9	14	-802	03
04	-874	-58	-55	-54	-53	-51	-44	-33	-23	-15	-8	-3	0	1	4	8	11	13	14	15	15	15	-803	04
05	-853	-35	-35	-35	-35	-35	-31	-25	-17	-13	-9	-7	-4	-2	1	9	15	20	24	29	32	34	-783	05
06	-828	-8	-8	-8	-7	-7	-4	-1	3	5	7	9	10	11	13	15	16	16	17	17	20	22	-795	06
07	-838	-20	-20	-20	-20	-19	-18	-17	-13	-10	-7	-5	-4	-2	0	2	5	7	8	9	11	14	-803	07
08	-827	-9	-9	-9	-9	-9	-9	-9	-9	-8	-6	-4	-2	0	0	1	1	1	1	3	6	8	-810	08
09	-838	-20	-20	-20	-20	-20	-19	-17	-13	-9	-8	-6	-3	0	0	1	8	9	9	9	9	14	-802	09
10	-827	-9	-9	-9	-9	-9	-8	-6	-3	-1	2	4	6	8	13	15	16	16	16	16	16	21	-798	10
11	-838	-20	-20	-20	-20	-19	-18	-15	-10	-6	-5	-3	-1	1	8	9	10	11	13	16	16	16	-802	11
12	-838	-20	-20	-20	-20	-20	-20	-18	-15	-12	-9	1	2	2	8	15	21	24	28	30	30	30	-788	12
13	-854	-36	-36	-36	-36	-35	-28	-20	-19	-19	-15	-11	-6	-4	-2	0	1	2	5	10	11	11	-807	13
14																								14
15																								15
16																								16
17																								17
18																								18
19																								19
20																								20
21																								21
22																								22
23																								23
24																								24
25																								25
26																								26
27																								27
28																								28
	-874	-58	-55	-54	-53	-51	-44	-33	-23	-19	-15	-11	-8	-8	-4	-2	0	1	2	5	10	11	-807	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 6 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - MARCH 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01																								
02																								
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12																								
13																								
14																		-6	-6	-14	-14	-18	-17	-14
15	-18	-14	-13	-5	-5	-5	-9	-9	-10	-12	-18	-18	-18	-13	-13	-5	-5	-3	5	5	-7	-1	9	9
16	4	-1	-9	-10	3	9	4	8	-1	3	-4	-16	-10	-12	-12	-17	-11	-9	1	3	-1	-11	-4	7
17	-24	-13	-14	-18	-18	2	-8	-11	-8	-3	-8	-9	-14	-21	-20	-2	-2	-9	-9	-5	-8	-5	-4	-8
18	-14	-18	-14	-14	-10	-5	-5	-5	-10	-10	-11	-5	-14	-14	-11	-24	-17	-12	-9	-10	-11	-7	-8	-3
19	-8	-13	-18	-12	-3	10	21	35	28	15	11	23	16	1	-28	-98	-214	-204	-127	-135	-135	-93	-87	-33
20	-18	2	1	-3	-13	-10	-23	-75	-88	-90	-76	-84	-117	-161	-93	-91	-44	-46	-58	-50	-69	-78	-26	-10
21	-10	-1	5	11	8	3	3	3	-1	3	3	3	4	8	10	10	10	10	10	3	3	3	2	2
22	4	-1	-6	-16	-12	-10	1	5	5	4	5	0	-5	4	9	-1	-9	-2	-2	-2	-4	-2	-2	-2
23	-4	-10	-11	-13	-13	-9	-3	-5	-5	-9	-10	-5	-5	-2	-2	1	3	3	3	4	0	-4	-4	-5
24	-5	-6	-6	-6	-5	-6	-6	-5	-9	-10	-5	-3	-2	-6	-6	-3	-3	2	6	6	4	6	6	4
25	5	4	4	5	8	10	10	13	12	9	9	9	5	4	4	2	2	2	4	8	8	9	5	5
26	2	2	3	4	6	9	10	12	12	11	9	9	6	4	3	2	2	5	9	12	20	21	15	12
27	15	9	9	5	9	5	9	10	11	9	5	5	2	-2	2	-2	2	2	5	8	12	15	15	15
28	9	8	3	3	-1	3	3	6	9	9	9	9	3	-3	-3	-5	-3	-4	-10	-9	-6	-5	-1	-3
29	-5	-4	-16	-2	8	2	9	9	9	5	-9	-10	-14	-12	-12	-25	-17	-3	-1	11	4	-4	-4	-13
30	-4	-1	-1	10	21	21	18	9	4	2	2	-5	2	2	3	3	3	3	0	-11	-9	-8	5	5
31	13	11	3	3	-1	2	2	5	5	2	2	2	2	2	-3	-4	-5	-5	-4	-9	-4	-9	-17	-8
	-3	-1	-5	-4	0	2	3	4	3	2	-1	0	-2	-3	-4	-3	-4	-3	2	2	-1	-4	1	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01																								01
02																								02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12																								12
13																								13
14	-839	-21	-21	-21	-21	-21	-21	-20	-19	-18	-17	-15	-14	-12	-9	-8	-5	-5	-5	-5	-5	-5	-823	14
15	-839	-21	-21	-20	-20	-19	-17	-14	-13	-12	-6	-6	-5	-5	0	6	8	11	13	15	15	15	-803	15
16	-839	-21	-21	-21	-21	-20	-18	-18	-11	-7	-5	-3	2	3	6	9	10	14	15	17	17	17	-801	16
17	-854	-36	-36	-36	-35	-28	-24	-20	-17	-12	-7	-6	-5	-5	-1	2	3	3	5	8	10	10	-807	17
18	-847	-29	-29	-29	-28	-25	-21	-20	-17	-15	-12	-8	-6	-6	-5	-2	2	3	3	3	3	8	-808	18
19	-1223	-405	-405	-338	-299	-258	-194	-144	-122	-82	-21	-11	-1	10	18	26	31	36	38	45	45	45	-773	19
20	-1045	-227	-212	-199	-187	-171	-148	-108	-90	-79	-66	-51	-36	-20	-13	-3	2	7	9	15	18	18	-800	20
21	-831	-13	-13	-13	-13	-11	-5	2	2	3	3	9	9	10	10	11	11	11	11	17	17	18	-800	21
22	-838	-20	-20	-20	-19	-18	-15	-7	-5	-4	-2	0	2	3	4	7	8	11	13	15	15	15	-803	22
23	-831	-13	-13	-13	-13	-13	-13	-6	-6	-5	-5	-4	-2	1	2	3	4	4	4	10	10	11	-807	23
24	-832	-14	-14	-14	-13	-13	-12	-11	-8	-8	-5	-5	-3	1	6	9	10	10	10	10	10	10	-808	24
25	-816	2	2	2	2	2	2	2	3	4	5	6	8	9	10	12	14	15	18	21	21	21	-791	25
26	-818	2	2	2	2	2	2	2	3	4	5	7	8	10	13	15	20	25	28	32	32	32	-788	26
27	-824	-6	-6	-5	-5	-4	-4	-2	1	3	4	6	7	9	11	13	14	15	15	15	18	20	-787	27
28	-832	-14	-14	-14	-14	-13	-11	-8	-5	1	2	2	3	3	6	8	9	13	14	15	15	15	-803	28
29	-846	-28	-28	-28	-28	-26	-21	-18	-13	-7	-5	-4	2	4	6	9	11	13	14	15	15	15	-803	29
30	-831	-13	-13	-13	-13	-13	-5	-5	-3	0	2	3	4	7	11	18	21	22	25	27	27	27	-791	30
31	-838	-20	-20	-20	-20	-18	-12	-8	-5	-4	-2	0	1	2	4	8	11	14	16	18	18	18	-788	31
	-1223	-400	-285	-181	-140	-101	-50	-17	-10	-8	-4	-818	2	4	7	10	14	20	23	37	39	44	-773	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 7 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - APRIL 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	5	12	6	12	8	-8	-4	-4	-9	-4	4	7	11	11	11	7	7	4	4	0	4	5	7	12
02	12	12	10	13	7	0	6	4	4	4	8	12	15	15	16	15	10	7	5	8	8	8	9	9
03	13	13	14	13	13	13	8	5	1	-3	8	12	5	7	12	8	13	13	9	-2	-5	1	0	5
04	7	-2	7	8	1	5	5	4	4	6	4	4	8	8	12	12	8	5	5	1	-1	-3	-3	5
05	-3	2	5	1	8	-4	-16	-19	-14	-22	-81	-77	-30	-83	-90	-53	-87	-83	-55	-17	-11	-11	-2	-2
06	-2	-7	7	-9	-3	-2	-5	-10	-10	-12	-11	-8	-4	-1	-4	-8	-16	-12	-10	-10	-10	-9	-10	-8
07	-3	-1	0	1	0	0	-3	-2	2	-5	-7	-8	-2	-4	-4	5	4	0	1	5	5	5	5	-3
08	-3	0	5	5	12	5	5	1	-3	-9	-12	-12	-12	-9	-12	-11	-11	-3	-3	-1	-2	-2	-3	-3
09	-3	-4	-12	-11	-12	-10	-11	-7	-8	-3	-1	-2	1	1	0	2	2	8	7	11	-1	-8	-3	-3
10	-9	-4	1	5	-2	-2	0	-2	-6	-6	-2	1	1	-2	-6	-2	-3	4	5	4	4	4	6	2
11	0	0	-2	-3	-3	-2	1	1	1	5	1	-2	-1	-3	-1	-3	-3	5	8	7	11	11	8	5
12	1	-2	1	1	0	-2	-2	-2	-6	-9	-2	0	-2	-3	-3	-3	-3	-6	-4	-4	-4	-2	-1	-3
13	0	0	-4	-4	0	4	4	4	4	5	8	8	4	-1	4	5	1	1	1	5	5	8	7	-5
14	-2	-7	3	-1	-3	-3	-8	-10	-1	-3	1	0	7	11	10	6	1	-2	0	6	6	14	19	22
15	21	11	12	4	5	11	11	11	8	11	7	11	11	7	5	0	4	4	4	4	4	8	12	8
16	8	4	-1	0	7	11	13	13	-7	-15	12	31	42	38	18	15	11	7	13	13	10	13	16	16
17	14	13	12	12	8	5	0	5	5	1	5	8	12	15	12	13	7	5	0	3	8	5	5	13
18	13	13	13	13	6	-2	-2	-11	-11	-11	-8	-2	-2	-2	-2	-2	-15	-34	-21	-17	-16	-13	-16	-10
19	-4	7	8	7	8	-2	-2	-2	-7	-10	-11	-11	-2	-2	-5	7	7	8	3	0	-1	-1	3	8
20	10	9	13	13	18	13	9	9	3	14	6	-3	-12	-18	-14	-21	-27	-16	-20	-18	-35	-49	-27	-39
21	-82	-57	-28	-11	-25	-40	-21	-19	-14	-9	-10	-8	-8	-9	-10	-11	-19	-35	-31	-22	8	-4	-3	-8
22	-12	-12	-18	-18	-19	-10	-10	-12	-12	-10	-12	-9	-12	-12	-12	-12	-11	-3	-1	-4	-3	-7	-3	-3
23	-8	-11	-4	-8	-8	-7	-1	-9	-8	-9	-9	2	-18	-15	7	7	3	-2	1	5	5	5	5	0
24	-3	-3	-3	-3	-3	0	4	4	6	7	8	6	5	1	-3	-12	-12	-5	7	5	-6	-8	-21	-22
25	-12	-12	-9	-12	-13	-14	-13	-21	-18	-18	-17	-17	-18	-18	-18	-12	-12	-11	-11	-4	0	4	4	-1
26	-4	-4	-9	-8	-12	-4	-4	-7	-3	-7	-8	-8	-12	-9	-12	-10	-10	-12	-16	-12	-11	-10	-8	-7
27	-11	-17	-17	-11	-10	-12	-16	-15	-12	-3	1	1	5	-9	-22	-13	-11	-15	-15	-11	-10	-1	-2	2
28	-2	-3	-11	-19	-17	-19	-24	-24	-19	-19	-25	-33	-15	-5	-8	-7	-11	-11	-6	-15	-15	-20	-22	-18
29	-18	-11	-14	-19	-23	-19	-12	-8	-10	-11	-12	-12	-8	1	8	5	-3	-3	-3	-3	-3	1	5	5
30	8	8	5	4	-3	-4	-4	-4	-4	-2	0	7	7	12	6	5	-3	-3	-7	-8	-3	-3	1	5
	1	1	4	1	-2	-3	-3	-3	-3	-3	-2	-2	2	0	-2	0	-3	-3	3	1	1	2	4	4

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-832	-12	-12	-12	-12	-12	-10	-8	-3	0	3	5	6	8	11	12	12	13	17	18	18	18	-802	01
02	-823	-3	-3	-3	-3	-2	0	4	5	8	9	12	13	13	15	17	18	19	22	25	25	25	-795	02
03	-831	-11	-11	-10	-9	-7	-3	-2	1	4	6	10	12	12	13	13	13	16	18	19	20	20	-800	03
04	-823	-3	-3	-3	-3	-3	-3	-3	2	4	4	5	5	8	9	11	12	13	13	17	18	19	-801	04
05	-972	-152	-151	-134	-121	-101	-88	-71	-59	-44	-23	-15	-11	-3	-2	3	8	13	15	19	19	19	-801	05
06	-839	-19	-19	-19	-19	-19	-18	-18	-13	-10	-9	-7	-5	-4	-3	3	5	8	10	13	13	13	-807	06
07	-832	-12	-12	-12	-11	-11	-9	-7	-4	-3	-1	1	3	4	5	5	11	12	12	12	12	12	-808	07
08	-832	-12	-12	-12	-12	-12	-12	-12	-11	-9	-6	-4	-2	0	3	5	8	10	11	12	12	12	-808	08
09	-832	-12	-12	-12	-12	-12	-12	-12	-5	-4	-3	-3	-2	0	3	7	9	11	14	17	17	17	-803	09
10	-831	-11	-11	-11	-11	-10	-7	-3	-3	-2	-2	0	4	4	5	5	8	10	10	11	11	11	-809	10
11	-823	-3	-3	-3	-3	-3	-3	-3	-3	-2	-1	1	2	4	5	8	10	10	11	11	11	14	-803	11
12	-832	-12	-12	-12	-11	-10	-9	-7	-4	-3	-3	-3	-2	4	4	5	5	5	5	5	5	5	-815	12
13	-831	-11	-11	-11	-11	-10	-8	-3	-1	0	2	3	4	5	5	9	12	13	13	17	17	17	-803	13
14	-838	-18	-18	-17	-17	-15	-11	-9	-8	-3	0	3	5	8	11	18	20	23	25	27	27	27	-793	14
15	-824	-4	-4	-4	-4	-4	-3	-1	1	5	6	8	9	10	11	12	18	22	24	26	26	26	-794	15
16	-847	-27	-27	-27	-22	-18	-12	-3	3	8	11	12	15	18	23	31	39	51	58	80	81	81	-759	16
17	-823	-3	-3	-3	-3	-3	-3	-2	0	2	4	7	11	12	13	14	16	18	18	19	19	19	-801	17
18	-873	-53	-53	-51	-48	-38	-24	-18	-16	-11	-9	-7	-5	-3	6	10	12	13	18	20	20	20	-787	18
19	-831	-11	-11	-11	-11	-11	-11	-10	-7	-4	-2	1	3	6	7	8	10	14	14	15	15	16	-804	19
20	-879	-59	-57	-53	-52	-49	-41	-32	-23	-18	-11	-8	7	11	13	14	19	21	24	26	26	26	-794	20
21	-900	-80	-79	-74	-70	-66	-56	-45	-32	-19	-17	-12	-11	-8	-6	-3	3	9	11	17	18	19	-801	21
22	-839	-19	-19	-19	-19	-19	-19	-18	-17	-15	-14	-12	-4	-4	-3	-3	-1	3	4	5	5	5	-815	22
23	-847	-27	-27	-25	-24	-21	-17	-14	-10	-7	-4	-3	4	4	5	5	12	13	13	19	19	19	-801	23
24	-847	-27	-27	-27	-27	-25	-20	-18	-4	-4	-3	-3	4	4	5	8	10	11	12	12	12	12	-808	24
25	-848	-26	-25	-20	-19	-19	-19	-19	-18	-17	-14	-12	-11	-8	-5	0	2	3	4	4	4	4	-816	25
26	-839	-19	-19	-19	-19	-18	-17	-18	-13	-11	-10	-7	-5	-4	-4	-3	-3	-3	0	4	4	4	-818	26
27	-848	-26	-26	-24	-20	-19	-19	-18	-14	-12	-12	-11	-9	-3	-1	4	5	6	6	6	6	6	-814	27
28	-884	-44	-44	-42	-39	-34	-30	-25	-22	-20	-18	-12	-11	-4	-3	-3	-2	5	5	6	6	8	-814	28
29	-847	-27	-27	-26	-26	-25	-22	-19	-15	-12	-10	-6	-4	-3	4	5	8	10	11	12	12	12	-802	29
30	-832	-12	-12	-12	-12	-11	-10	-8	-4	-4	-3	1	4	5	11	12	12	12	12	12	12	12	-808	30
	-972	-147	-94	-84	-54	-34	-20	-15	-11	-4	-3	-820	4	5	9	12	13	18	23	48	54	58	-759	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 8 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - MAY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	4	3	1	1	-5	-7	-12	-12	-12	-7	-7	-3	1	4	1	1	1	-4	-7	-7	-7	-5	1	1
02	6	4	4	1	1	1	-4	-7	-7	-3	1	1	1	1	1	-5	-7	-13	-15	-20	-18	-14	-13	-5
03	-12	-15	-19	-11	-11	-8	-7	-11	-12	-10	-7	-13	-19	-15	-12	-13	-7	-7	-8	-8	-8	-7	-11	-20
04	-23	-36	-27	-23	-23	-23	-23	-20	-16	-16	-16	-19	-21	-20	-21	-18	-19	-22	-35	-29	-15	5	2	-2
05	2	5	4	5	1	1	1	1	-3	-1	-4	-3	1	1	1	2	2	-8	-11	-18	-28	-25	-14	-14
06	-6	-11	-11	-11	-15	-11	-6	-3	-6	-7	-7	-7	-6	-6	2	2	2	-2	-16	-13	-11	-6	-13	
07	-15	-11	-7	-7	-7	-4	1	-4	-3	-8	-7	-7	-7	-7	-7	2	2	2	-1	0	-5	-9	-2	-10
08	-11	-6	-6	-6	-4	-2	-3	1	1	1	-4	-6	-6	-11	-11	-12	-10	-5	-5	-5	-9	-10	-14	-14
09	-14	-19	-15	-20	-22	-21	-26	-27	-29	-33	-26	-22	-25	-18	-15	-15	-15	-11	-10	-5	-10	-18	-22	-19
10	-12	-6	-12	-15	-19	-15	-15	-16	-16	-13	-15	-22	-28	-22	-22	-22	-21	-21	-21	-13	-12	-12	-8	-12
11	-8	-14	-21	-22	-15	-7	-4	-11	-7	-11	-8	-6	-8	-11	-11	-7	-17	-14	-9	5	7	5	8	13
12	12	3	2	-10	-15	-15	-15	-15	-7	-12	-13	1	-6	-15	-17	-7	-14	-14	-5	-5	4	4	4	4
13	3	2	-8	-2	1	-5	-3	1	1	9	7	5	5	1	-3	-4	-8	-8	-3	2	2	8	10	9
14	8	9	4	1	1	-5	-7	-3	1	1	4	9	9	9	2	2	-5	-13	-14	-12	-10	-16		
15																								
16													-7	-7	1	1	1	1	1	1	1	-6	-15	-22
17	-15	-11	-7	-4	-12	-18	-14	-19	-16	-14	-7	-7	1	5	5	5	1	2	-3	-8	-8	-4	-3	-3
18	-5	-2	1	8	1	1	-3	-7	-7	-7	-7	-4	1	8	10	7	4	4	5	-2	-3	-3	-4	-5
19	-5	5	-1	-15	-8	-7	-11	-7	-7	-7	-7	-7	1	-6	-6	4	10	2	3	2	2	2	-2	-2
20	-2	2	2	5	5	8	3	5	1	1	1	-7	-11	-7	-2	0	6	6	5	2	2	-5	-5	-6
21	-5	-2	-2	1	1	1	1	1	1	-3	-3	1	1	2	8	5	10	10	10	8	10	2	2	1
22	-3	-3	-3	1	5	8	8	8	8	5	1	1	3	2	1	1	1	4	5	5	5	4	-3	-4
23	-7	-5	-4	-7	-7	-7	-7	-10	-7	-7	-7	-7	-7	-7	-7	-7	-3	-3	1	8	8	8	5	5
24	1	-3	-3	1	1	-4	1	1	4	2	-2	5	5	-1	2	4	4	3	5	8	11	8	5	8
25	5	8	3	-4	-4	-3	1	1	4	4	8	8	8	8	8	8	8	8	15	16	16	16	17	17
26	10	8	1	4	8	3	7	15	15	18	21	21	17	15	14	8	8	8	8	10	12	8	8	8
27	8	8	4	-2	-4	-2	-6	-3	2	2	2	2	2	-4	-26	-39	-32	-20	-15	-11	-10	8	13	13
28	8	11	5	-10	-8	2	-5	-6	-5	-12	4	10	10	13	8	-6	-22	-14	-10	-10	-14	-22	-23	-17
29	-6	-6	-3	-6	-7	-15	-14	-12	-11	-13	-3	4	-4	8	10	6	10	3	3	4	-3	-2	4	12
30	11	5	2	4	5	-3	-6	-6	-6	-6	-4	-2	-2	-8	-12	-11	-18	-18	-19	-17	-11	-8	-10	2
31	-2	-4	-15	-25	-15	-3	1	1	1	-4	-7	-11	-15	-21	-12	-7	-3	5	10	6	2	-6	-6	-6
	1	1	-1	-4	-5	-5	-6	-6	-6	0	-5	-4	-3	-5	-3	0	-1	-1	0	1	-3	0	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-832	-16	-16	-16	-16	-16	-15	-14	-11	-9	-7	-5	-3	-2	0	4	6	8	8	9	9	9	-807	01
02	-838	-22	-22	-22	-22	-22	-21	-17	-13	-7	-5	-4	-2	-1	0	4	7	8	9	9	9	9	-807	02
03	-838	-22	-22	-22	-22	-22	-21	-19	-16	-13	-11	-9	-7	-7	-6	-5	1	2	2	2	2	2	-814	03
04	-868	-52	-52	-50	-48	-42	-38	-30	-27	-24	-22	-21	-19	-17	-15	-3	2	7	9	13	15	17	-799	04
05	-852	-36	-36	-34	-32	-28	-22	-20	-12	-5	-3	-2	0	1	2	6	7	8	9	14	15	16	-800	05
06	-838	-22	-22	-22	-22	-21	-19	-18	-8	-7	-7	-8	-8	-8	1	2	2	2	2	9	10	10	-806	06
07	-831	-15	-15	-15	-15	-15	-14	-13	-10	-9	-7	-6	-3	0	1	2	3	3	10	11	11	11	-805	07
08	-831	-15	-15	-15	-15	-15	-14	-7	-7	-6	-6	-6	-6	-5	-2	1	2	2	2	3	3	3	-813	08
09	-853	-37	-37	-37	-37	-36	-33	-29	-26	-24	-21	-18	-16	-15	-10	-6	-5	-5	-5	-5	-5	-1	-814	09
10	-845	-29	-29	-29	-29	-27	-28	-24	-21	-18	-18	-15	-15	-12	-9	-8	-4	-3	-3	-3	-3	-3	-819	10
11	-838	-22	-22	-22	-22	-22	-16	-15	-14	-11	-8	-7	-6	-2	4	5	8	11	12	13	13	13	-803	11
12	-838	-22	-22	-22	-22	-18	-18	-15	-15	-12	-7	-8	-5	2	3	4	11	12	13	13	13	13	-803	12
13	-823	-7	-7	-7	-7	-7	-7	-6	-4	-1	1	2	2	5	8	8	10	13	14	15	15	15	-801	13
14	-838	-22	-22	-21	-19	-15	-15	-14	-8	-5	-3	0	1	4	6	8	8	9	10	10	10	10	-808	14
15																								15
16	-838	-22	-22	-22	-22	-22	-22	-19	-11	-6	-5	-4	-3	-1	0	1	8	9	9	9	9	9	-807	16
17	-839	-23	-23	-23	-23	-22	-21	-18	-14	-11	-8	-6	-1	1	2	7	8	9	9	10	10	10	-806	17
18	-823	-7	-7	-7	-7	-7	-7	-7	-5	-4	-3	-1	0	4	5	8	10	11	11	12	12	12	-804	18
19	-831	-15	-15	-15	-15	-15	-15	-13	-10	-7	-6	1	1	2	2	4	7	8	10	11	11	11	-805	19
20	-831	-15	-15	-15	-14	-13	-11	-7	-5	-2	1	2	2	5	7	8	10	10	10	10	10	10	-808	20
21	-823	-7	-7	-7	-7	-6	-6	-5	-3	-1	1	1	2	5	8	10	10	10	10	10	10	10	-806	21
22	-823	-7	-7	-7	-7	-7	-8	-8	-4	-2	-1	1	3	4	8	7	8	8	8	8	8	8	-807	22
23	-832	-16	-16	-16	-16	-16	-15	-14	-12	-10	-9	-7	-4	-1	2	6	8	11	13	15	15	15	-801	23
24	-823	-7	-7	-7	-7	-7	-8	-5	-3	-2	0	3	7	8	9	9	13	15	16	16	16	16	-794	24
25	-823	-7	-7	-7	-7	0	0	0	1	3	5	7	8	12	15	16	17	17	17	17	20	23	-792	25
26	-815	1	1	1	1	1	1	3	4	6	7	8	11	15	16	20	21	22	22	22	22	22	-794	26
27	-873	-57	-56	-52	-48	-42	-35	-21	-11	-8	-2	0	1	2	7	12	14	17	18	21	21	21	-795	27
28	-845	-29	-29	-29	-29	-28	-28	-22	-15	-11	-8	-5	-1	5	8	12	14	16	17	19	19	19	-797	28
29	-831	-15	-15	-15	-15	-15	-15	-15	-9	-6	-2	2	3	4	8	11	12	13	15	17	17	17	-798	29
30	-838	-22	-22	-22	-22	-21	-20	-18	-14	-12	-10	-8	-5	-2	1	10	10	11	14	18	18	18	-797	30
31	-846	-30	-30	-30	-29	-28	-23	-16	-14	-8	-6	-5	-2	1	2	8	10	10	10	10	10	10	-806	31
	-873	-52	-43	-31	-29	-23	-22	-18	-8	-7	-6	-818	1	2	8	8	11	15	17	22	22	22	-792	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 9 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - JUNE 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	1	10	10	11	14	14	14	9	8	8	10	10	14	15	15	15	15	15	12	8	4	1	8	8
02	5	1	2	3	7	1	-1	-1	-1	-1	-1	-10	-13	-7	-21	-26	-50	-44	-38	-25	-36	-25	-29	1
03	5	-11	-7	-12	-4	-4	-12	-9	-11	-13	-11	-14	-10	13	10	11	9	12	-24	-12	34	44	-27	-52
04	-21	13	5	-14																				
05																				0	-8	-17	-13	-13
06	-12	-10	0	4	8	9	15	15	29	1	1	2	0	9	10	-4	-4	-4	2	4	-4	-5	-8	-7
07	0	-5	-5	-5	0	-1	-1	3	7	7	3	-1	-10	-5	-5	-9	-13	1	-5	-8	1	-4	-8	-11
08	-8	-5	0	-5	-9	-4	-5	-13	-17	-5	0	0	0	1	1	1	5	12	14	2	6	13	19	10
09	4	-7	-7	1	1	0	0	4	4	0	0	3	-13	-19	-12	-8	-12	-7	-11	-4	-7	-1	11	12
10	17	9	9	8	7	8	-2	-4	4	8	3	-1	-4	0	0	4	9	12	13	7	-3	-4	1	8
11	3	-1	5	-4	-3	-8	-5	0	-4	2	8	0	-8	-10	-16	-8	-12	-13	-9	1	10	11	18	18
12	16	18	16	11	8	8	8	8	8	8	10	12	11	-5	-11	-11	-9	9	8	10	10	14	18	25
13	21	17	17	18	10	8	6	8	8	8	18	18	18	11	-7	-8	1	-4	13	9	9	4	14	20
14	19	17	12	0	8	6	16	11	16	16	8	8	14	20	24	24	19	23	12	12	3	3	3	3
15	3	-4	8	1	1	14	9	3	0	0	-8	2	8	10	11	18	18	13	1	4	-8	-8	-5	-11
16	-14	-12	-13	-9	-9	1	0	-3	0	5	3	-6	-5	-4	-11	4	5	1	-6	-4	-13	-8	-6	-7
17	-10	-16	2	0	0	0	0	0	-7	0	0	-4	0	2	8	13	17	17	9	7	1	-3	-4	2
18	2	-2	-8	-16	-16	0	4	4	4	8	8	2	8	9	1	3	3	-17	-8	9	16	8	8	10
19	16	16	15	15	15	11	7	2	-1	-10	-15	-17	-17	-17	-17	-21	-17	-16	-9	-14	-16	-16	-16	-20
20	-20	-16	-23	-20	-16	-9	-9	-9	-9	-17	-15	-16	-16	-20	-23	-20	-16	-16	-16	-13	-9	-15	-16	-16
21	-16	-16	-17	-16	-17	-17	-16	-15	-17	-23	-32	-21	-16	-16	-16	-22	-37	-38	-61	-81	-40	-28	-19	-14
22	-16	-16	-15	-16	-7	-5	0	-16	-14	-14	-13	-14	-16	-19	-36	-33	-33	-27	-21	-38	-31	-35	-24	-12
23	-2	-3	-8	-8	-14	-8	0	0	0	3	2	0	1	8	-7	-24	-27	-41	-19	-12	-13	-20	-24	-30
24	-20	-21	-18	-18	-22	-20	-15	-23	-26	-19	5	-6	-7	-7	-7	-7	-12			-4	2	-4	18	15
25	-4	-4	-10	-4	-1	-6	0	-10	-8	-16	-15	-9	-7	-6	-14	-10	-3	-9	5	4	-8	5	1	5
26	26	30	13	-4	-4	-3	-1	6	6	6	11	11	6	9	6	1	4	4	5	-3	-2	5	5	2
27	1	5	-1	-10	-4	-7	-8	-10	-7	1	-14	-17	-28	-47	11	6	-23	-37	-88	-75	-53	-51	-56	-4
28	2	0	-49	-94	-29	-51	-127	-109	-67	-125	-55	-51	-60	-23										
29																								
30																			4	4	-2	-8	-11	-4
	2	1	0	-1	0	0	0	0	0	0	0	-1	-1	0	0	-2	-3	-1	0	1	0	0	1	2

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-822	-1	-1	-1	-1	-1	1	5	7	8	9	12	14	14	15	15	15	16	16	21	21	22	-798	01
02	-889	-88	-84	-82	-58	-55	-44	-40	-31	-22	-13	-8	-5	-2	2	5	7	8	9	18	17	18	-803	02
03	-891	-70	-69	-64	-61	-50	-41	-19	-14	-8	-7	-5	0	10	13	19	38	44	46	47	47	47	-774	03
04	-887	-48	-48	-45	-43	-40	-32	-27	-18	-13	-3	3	8	12	13	20	21	21	21	21	21	21	-800	04
05	-844	-23	-23	-23	-23	-22	-21	-19	-16	-14	-13	-12	-10	-9	-5	0	4	6	7	8	8	8	-813	05
06	-837	-18	-18	-18	-18	-11	-9	-9	-1	0	0	1	7	8	12	15	19	29	33	41	43	45	-778	06
07	-837	-16	-16	-16	-16	-13	-10	-9	-8	-3	-1	0	0	0	1	4	6	7	9	14	15	15	-806	07
08	-838	-17	-17	-17	-17	-17	-15	-11	-7	-5	-2	0	1	9	10	14	17	21	24	28	28	28	-795	08
09	-844	-23	-23	-23	-23	-21	-14	-9	-8	-7	-7	-2	0	2	5	9	10	17	18	18	18	18	-803	09
10	-830	-9	-9	-9	-9	-9	-6	-4	0	1	3	6	8	8	9	18	17	17	17	24	25	25	-798	10
11	-837	-16	-16	-16	-16	-16	-16	-14	-10	-7	-4	-2	1	5	9	12	14	16	16	17	17	17	-804	11
12	-844	-23	-23	-21	-19	-16	-13	-8	2	5	7	9	10	12	15	17	19	23	24	25	25	25	-798	12
13	-837	-16	-16	-15	-14	-12	-8	-3	3	6	8	10	13	15	17	19	23	25	25	25	27	31	-789	13
14	-826	-5	-5	-5	-5	-3	0	2	6	9	12	14	16	18	22	24	25	26	27	27	27	29	-791	14
15	-837	-16	-16	-13	-10	-9	-9	-7	-2	0	1	5	8	10	14	16	17	22	23	25	25	25	-796	15
16	-844	-23	-23	-22	-21	-20	-15	-13	-9	-8	-6	-3	0	1	2	6	8	9	9	15	16	16	-805	16
17	-843	-22	-22	-21	-19	-16	-9	-7	-5	-3	-1	0	1	4	9	16	17	17	17	17	17	17	-804	17
18	-851	-30	-28	-22	-21	-19	-16	-15	-5	1	2	4	8	7	8	13	16	17	17	17	17	17	-804	18
19	-845	-24	-24	-24	-24	-23	-22	-21	-18	-17	-16	-10	-9	2	11	15	16	16	16	21	22	22	-798	19
20	-844	-23	-23	-23	-23	-23	-23	-19	-17	-17	-16	-16	-16	-15	-13	-11	-10	-9	-9	-9	-9	-9	-830	20
21	-898	-77	-76	-74	-72	-68	-57	-43	-31	-23	-20	-18	-17	-16	-16	-10	-9	-8	-8	-7	-7	-7	-828	21
22	-879	-58	-58	-49	-42	-39	-36	-35	-29	-22	-19	-17	-15	-13	-10	-5	-2	0	1	2	2	2	-819	22
23	-869	-48	-48	-48	-48	-48	-37	-28	-21	-15	-9	-8	-4	-1	2	7	9	10	17	18	18	18	-803	23
24	-851	-30	-30	-30	-30	-28	-28	-24	-21	-17	-15	-8	-7	-5	3	11	19	28	28	31	33	35	-785	24
25	-850	-29	-29	-29	-29	-29	-24	-17	-15	-9	-7	-6	-5	0	3	4	12	13	20	21	22	25	29	-791	25
26	-833	-12	-12	-12	-10	-8	-5	-3	3	4	4	5	7	10	12	19	26	29	30	38	37	37	-784	26
27	-1080	-237	-182	-132	-118	-107	-87	-68	-45	-26	-15	-7	-5	0	4	12	13	20	22	35	36	37	-784	27
28	-1198	-387	-278	-241	-224	-198	-174	-144	-115	-89	-74	-61	-45	-35	-20	-4	13	21	28	38	38	37	-784	28
29																								29
30	-834	-13	-13	-13	-13	-13	-13	-12	-11	-8	-7	-5	-3	-1	0	2	3	4	4	4	4	4	-817	30
	-1198	-241	-178	-111	-79	-55	-32	-18	-15	-8	-1	-821	3	8	10	18	17	24	27	45	46	47	-774	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 10 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - JULY 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	4	9	18	18	15	10	8	7	6	10	14	8	8	4	17	-9	0	-1	5	7	21	14	-9	-14
02	-13	-13	-6	0	2	-43	-4	8	11	11	-1													
03																								
04																			-54	-44	3	1	-89	-20
05	-2	4	4	10	-14	-58	-13	-9	-15	-18	0	13	4	-15	-12	-8	-14	-48	-34	38	14	17	0	-38
06	-9	-7	1	0	-13	-8	-4	2	18	6	6	6	1	-9	-7	-7	-5	-6	-4	-9	-8	-7	0	0
07	-9	-7	-10	-10	-5	4	8	11	22	18	9	8	8	1	2	-4	-5	4	2	11	18	5	-7	-5
08	7	7	6	15	14	10	14	14	14	14	10	10	6	6	1	0	-1	3	3	-2	-28	-46	-72	-26
09	-19	8	-3	10	-1	1	7	1	1	7	9	9	6	1	0	-3	-3	-10	-7	-2	-18	2	7	9
10	10	2	-2	-2	2	1	6	-3	-3	0	6	-3	1	1	0	2	6	-2	0	7	16	8	-1	7
11	-1	-11	-2	3	-2	-3	8	7	10	8	5	10	7	1	3	1	-8	0	7	5	-10	-6	2	12
12	24	16	17	27	24	-6	-11	7	-12	-2	8	9	-16	-10	-9	-3	1	-4	-5	-5	-3	-6	-4	-3
13	-5	-12	-11	-9	-6	-1	-1	-6	-13	-18	-14	10	11	12	-4	-8	-18	-10	-18	-6	-3	-7	-11	-7
14	-8	-7	-4	-6	-24	-17	-4	-8	-7	-10	-23	-29	-23	-26	-35	-14	-9	6	0	-4	-2	-5	-10	-12
15	-9	5	12	0	2	1	10	-23	-40	-11	-14	-21	-18	-9	6	0	-5	-11	-4	-10	-11	4	3	-4
16	5	17	14	12	9	-11	-20	-27	-15	-11	-8	-17	-16	-34	-27	-12	-15	-16	-15	-13	-6	8	-6	-2
17	1	-9	-5	0	-12	-15	-3	-13	-6	-3	0	-8	-4	1	-6	-9	-40	-12	-24	-38	-17	-14	-19	-11
18	23	19	13	-32	-5	-7	-19	-8	1	15	-10	-1	-2	-7	-22	-2	0	-15	-9	-23	-28	-7	-18	-21
19	-55	-81	-49	-32	-25	-18	-7	-1	8	6	-2	-3	8	7	7	8	4	2	-7	-18	-8	-1	7	0
20	2	-2	1	0	2	-2	-8	-6	-5	14	-1	-6	10	-7	3	-12	-12	-8	8	-9	-6	-19	-6	-3
21	2	-1	-8	-8	5	-8	-8	0	-5	3	1	-2	-1	-5	2	10	5	1	-4	-18	4	-9	-14	9
22	-15	-2	-3	-7	-4	-10	-13	-15	-7	-2	6	14	16	22	17	15	10	15	9	12	4	-9	-15	-9
23	-1	-1	-1	-1	-2	12	-6	8	5	5	10	16	19	8	3	-1	-3	-18	-18	-14	-11	2	-3	-11
24	-12	-9	8	-1	-4	-4	-10	-5	-8	17	15	14	-14	12	10	1	-1	-6	-9	2	3	8	11	10
25	11	10	9	8	2	5	5	5	5	-5	-11	-16	-15	-11	-11	-11	-11	-8	-9	-8	-1	5	-4	-4
26	1	5	-2	-6	-8	-11	-8	0	-3	5	8	8	7	9	5	-3	9	7	2	-3	7	3	9	9
27	-3	-8	-5	6	0	1	6	8	6	8	8	-2	-2	-5	5	-6	-4	-3	4	-4	-2	9	9	
28												18	28	5	-5	1	4	4	10	15	12	13	14	19
29	14	10	6	1	-9	-3	1	-119	-41	13	11	18	-32	-34	-71	-27					-5	-19	-20	5
30	10	-19	-13	-14	1	13	-7	-9	-6	-6	-9	-11	-3	0	3	-19	7	-21	-25	-13	-6	-6	-21	-16
31	-18	-44	-51	-38	-5	1	0	-5	-3	-7	-6	2	10	7	-2	2	7	-1	-5	-11	-11	-15	-10	-9
	1	1	4	0	0	-1	-1	0	-1	6	5	6	5	5	1	-1	-1	-1	-1	-3	-1	1	-2	-1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-846	-20	-20	-20	-17	-14	-11	-7	1	5	8	9	14	15	16	17	25	27	33	35	35	35	-791	01
02	-988	-180	-145	-118	-91	-77	-37	-18	-9	-7	-3	0	3	8	10	16	21	25	31	38	37	39	-787	02
03																								03
04	-958	-130	-129	-123	-117	-103	-84	-72	-54	-46	-37	-23	-18	-7	1	12	21	24	28	27	27	27	-799	04
05	-959	-132	-124	-103	-94	-84	-57	-37	-22	-15	-10	-2	1	8	10	17	24	36	42	51	51	52	-774	05
06	-868	-42	-39	-24	-22	-19	-13	-11	-9	-3	-2	-1	0	3	7	8	14	17	19	22	22	22	-804	06
07	-842	-16	-16	-15	-15	-13	-10	-9	-3	-2	0	2	5	8	14	18	22	23	23	23	23	23	-803	07
08	-929	-103	-99	-91	-84	-73	-49	-30	-3	3	6	7	10	11	13	15	19	22	22	23	23	23	-803	08
09	-867	-41	-41	-38	-32	-21	-14	-10	-3	-2	1	3	6	7	9	14	15	16	16	18	18	18	-808	09
10	-837	-11	-11	-9	-9	-8	-7	-4	-2	0	1	3	5	6	7	8	18	17	17	17	17	17	-809	10
11	-842	-16	-16	-16	-16	-11	-10	-7	-3	-2	5	5	6	6	9	14	15	20	23	24	24	24	802	11
12	-849	-23	-23	-23	-23	-21	-16	-10	-7	-1	0	0	1	8	15	23	25	28	30	31	31	35	-788	12
13	-854	-28	-28	-28	-28	-23	-20	-16	-12	-9	-8	-8	-2	0	1	10	13	15	16	21	22	24	-802	13
14	-871	-45	-45	-43	-41	-37	-34	-29	-20	-14	-10	-9	-5	-1	0	6	7	8	8	8	8	8	-818	14
15	-877	-51	-51	-51	-48	-43	-30	-20	-13	-9	-8	-1	0	1	8	9	15	17	24	25	25	25	-801	15
16	-864	-38	-38	-38	-38	-32	-25	-24	-17	-15	-12	-9	-8	0	8	16	16	17	18	23	24	24	-801	16
17	-899	-73	-69	-59	-53	-48	-40	-29	-17	-12	-9	-7	-4	-1	0	7	9	17	25	31	33	35	-791	17
18	-882	-88	-83	-54	-48	-39	-32	-27	-18	-13	-9	-8	0	1	7	18	25	28	27	35	35	35	-791	18
19	-933	-107	-107	-95	-85	-78	-57	-40	-21	-9	-3	-2	1	4	6	9	14	15	15	15	15	15	-811	19
20	-880	-34	-32	-27	-23	-21	-18	-13	-9	-6	-3	-1	2	4	6	10	18	22	24	42	43	44	-782	20
21	-886	-60	-59	-38	-31	-22	-19	-11	-9	-4	-1	0	2	5	8	9	17	18	22	26	27	33	-792	21
22	-885	-38	-36	-31	-29	-23	-18	-13	-9	-3	-1	4	8	14	15	18	20	21	22	23	26	29	-798	22
23	-854	-28	-28	-27	-25	-22	-18	-14	-7	-2	-1	1	3	7	11	16	23	24	24	30	31	31	-795	23
24	-858	-30	-30	-27	-25	-20	-15	-11	-7	-2	0	6	7	10	15	16	23	24	24	31	32	32	-794	24
25	-844	-18	-18	-18	-18	-18	-17	-15	-12	-10	-7	-5	0	4	6	13	14	15	15	21	22	23	-803	25
26	-837	-11	-11	-11	-11	-11	-10	-8	-4	-1	2	4	5	7	12	13	14	14	14	15	19	21	-804	26
27	-836	-10	-10	-10	-10	-10	-9	-6	-2	-1	2	3	4	5	6	8	15	18	18	19	19	19	-807	27
28	-835	-9	-9	-2	-2	-2	-2	-1	4	7	8	9	17	18	19	22	28	33	36	38	38	38	-788	28
29	-966	-140	-139	-130	-125	-121	-91	-55	-31	-18	-10	-1	4	8	13	19	22	28	31	32	32	36	-798	29
30	-869	-43	-43	-38	-37	-31	-28	-22	-17	-13	-10	-7	-5	-2	3	10	13	18	25	29	30	30	-796	30
31	-903	-77	-76	-67	-60	-56	-47	-38	-12	-9	-7	-4	-2	0	3	8	9	12	13	14	14	14	-700	31
	-988	-134	-118	-77	-57	-43	-28	-18	-10	-5	-2	-826	5	7	9	15	18	24	28	38	41	49	-700	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 11 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - AUGUST 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-7	-2	9	14	14	12	5	2	-1	-9	-10	-8	-5	-4	1	7	8	4	2	0	5	-2	-3	1
02	4	5	13	12	26	18	15	13	-1	-25	-5	-7	-9	-4	0	12	13	9	13	6	-4	-6	-8	-5
03	5	7	5	0	4	-4	0	2	4	3	4	4	1	0	3	5	8	0	-15	-2	0	-2	-3	-11
04	-13	-12	-20	-16	-39	-28	-18	-14	-34	-10	0	-3	0	-1	-2	2	2	5	9	6	3	6	3	1
05	1	-2	-6	-2	5	5	6	12	0	11	10	6	0	-1	0	0	5	4	5	4	4	0	0	1
06	-8	-7	1	4	-2	-5	-2	-5	-5	-8	-8	-9	-9	-12	-7	-2	4	11	9	3	13	11	10	6
07	5	8	2	3	6	8	11	7	11	14	11	5	3	2	4	8	-4	14	17	-4	11	22	33	30
08	28	34	-32	-71	-38	8	-45	-55	-42	-6	-2	-37	-27	-42	-33	-5	-72	-45	-28	-38	-13	-23	-37	-45
09	-18	-32	-7	-21	-30	-8	6	-3	-9	5	5	8	11	7	-4	-21	-9	-7	-19	-11	-8	-12	-14	-18
10	-18	-21	-13	-11	-13	-16	-11	2	7	5	-5	-3	-8	-17	-20	-20	-10	-8	-22	-11	-8	-12	-13	-15
11	-11	9	9	7	3	1	0	3	3	8	12	7	-1	1	2	-3	-5	-14	-15	3	-2	1	5	10
12	12	21	19	11	5	2	3	-8	-7	-3	1	4	10	10										
13																								
14																6	5	5	4	7	1	-4	-13	-14
15	-5	-4	7	4	8	6	1	-8	-4	-5	-8	-9	-17			-14	-11	-10	-3	-8	-8	-17	-11	-14
16	-15	-12	-18	-23	5	-3	-35	-23	27	24	12	28	10	-20	10	-5	-13	-31	-3	1	-15	-24	-7	-5
17	-2	-13	4	8	8	3	4	4	3	-3	-2	-3	-3	0	1	8	9	12	10	7	4	3	4	-2
18	-2	-2	-6	-4	0	-3	-6	-6	-6	-13	-13	-6	-6	-7	-6	-4	1	2	8	8	10	10	9	0
19	-4	-2	-5	-18	-17	-19	-20	-9	-10	-8	-2	0	-8	-8	-2	-2	-1	2	-7	-4	-8	-9	-4	-1
20	-8	-7	-5	-4	-3	1	9	1	-9	-13	-14	-10	-19	-14	-14	-19	-6	-6	-17	-8	-26	-30	-9	-39
21	-51	0	-36	-47	-60	-26	-30	-36	-12	-21	-18	-38	-8	-12	-30	-28	-11	-57	10	-3	-2	-2	-18	-3
22	-13	-19	-22	-20	-13	-9	-11	1	4	8	5	5	7	1	-7	1	-4	2	-1	-1	6	16	16	8
23	13	8	3	-6	-6	-3	0	2	3	4	8	11	12	8	1	-1	-4	-3	0	2	8	10	11	11
24	9	9	6	3	0	-1	-1	-2	0	7	10	11	11	10	7	4	2	1	1	3	6	9	11	12
25	12	12	9	6	3	-1	-1	1	3	4	6	10	10	5	1	-5	-5	-8	-5	-7	-10	-11	-8	-7
26	-3	-9	-17	-7	-18	-12	-25	-24	-27	-29	-28	-16	1	4	2	5	6	5	4	3	7	7	15	13
27	9	20	12	-4	1	-2	2	-2	-3	1	4	4	8	11	1	0	1	-1	-13	-10	-17	-13	-5	-2
28	22	19	17	4	-4	-13	-11	3	-8	-2	-1	-3	1	5	3	4	-3	-7	-8	-5	-9	-13	0	3
29	3	-13	-23	-9	-19	-18	-15	-18	-10	-11	-13	-11	-8	-5	2	4	0	-5	-7	-8	-7	-8	2	1
30	0	0	-4	-8	-3	-8	-9	-11	-9	-5	-6	-1	-2	2	5	5	5	0	5	8	7	5	6	2
31	8	-5	13	21	12	9	5	-14	-8	3	-10	-23	3	3	18	11	-8	-29	-7	17	-29	-8	28	-137
	0	0	0	-1	1	-2	-1	-1	-2	-1	-1	0	1	0	2	2	0	1	0	2	0	-1	0	0

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-842	-16	-16	-15	-14	-12	-10	-9	-4	-1	1	2	5	7	10	13	14	15	16	17	17	17	-809	01
02	-881	-35	-35	-34	-31	-25	-15	-10	-8	-3	1	6	10	12	14	18	21	27	28	30	30	30	-794	02
03	-845	-18	-19	-19	-19	-15	-13	-6	-2	0	2	3	4	5	6	7	8	9	10	12	12	12	-814	03
04	-880	-54	-54	-51	-47	-46	-38	-28	-17	-11	-3	-1	1	3	4	7	7	10	13	15	15	15	-809	04
05	-833	-7	-7	-7	-7	-6	-4	-2	0	1	2	4	5	5	7	11	12	13	13	15	15	15	-811	05
06	-840	-14	-14	-12	-11	-11	-10	-9	-8	-5	-4	-2	2	5	9	11	13	15	17	19	19	19	-804	06
07	-835	-9	-9	-8	-7	-6	-2	1	3	5	6	8	9	12	15	24	32	34	36	39	39	40	-785	07
08	-985	-139	-135	-118	-112	-101	-90	-73	-48	-39	-38	-31	-25	-15	-4	12	27	35	38	43	43	44	-781	08
09	-871	-45	-45	-45	-43	-39	-31	-23	-18	-13	-12	-7	-4	0	5	9	13	17	18	24	24	25	-801	09
10	-880	-34	-34	-31	-28	-26	-23	-22	-17	-15	-13	-11	-9	-6	-2	3	8	10	11	14	15	15	-808	10
11	-848	-23	-23	-21	-20	-18	-14	-9	-2	1	2	3	4	6	8	11	12	14	14	14	14	14	-810	11
12	-834	-8	-8	-8	-8	-8	-8	-7	-3	1	3	5	9	11	13	18	21	24	25	28	28	28	-798	12
13																								13
14	-841	-15	-15	-15	-15	-15	-15	-14	-11	-3	0	4	5	5	8	8	8	9	9	11	11	11	-815	14
15	-859	-33	-33	-30	-26	-23	-19	-16	-12	-9	-7	-5	-2	-1	2	6	10	12	13	19	20	21	-805	15
16	-887	-81	-81	-58	-47	-45	-38	-32	-20	-16	-11	-8	-1	4	12	23	27	30	33	38	40	40	-786	16
17	-849	-23	-23	-22	-20	-18	-10	-3	-1	1	2	4	5	6	8	10	12	13	13	15	15	15	-811	17
18	-842	-18	-18	-16	-16	-15	-13	-9	-6	-5	-4	-2	-1	2	5	10	11	12	13	16	16	16	-810	18
19	-855	-29	-29	-28	-27	-25	-22	-18	-10	-8	-5	-4	-3	-1	0	2	3	4	5	8	8	8	-818	19
20	-902	-76	-73	-59	-52	-48	-36	-25	-17	-13	-10	-8	-6	-5	-1	2	5	10	11	14	15	15	-811	20
21	-954	-128	-124	-113	-102	-84	-70	-50	-39	-28	-22	-15	-10	-6	-2	5	10	17	19	21	21	21	-805	21
22	-859	-33	-33	-32	-30	-27	-22	-17	-10	-6	-1	1	3	5	7	13	16	18	19	20	20	20	-808	22
23	-834	-8	-8	-8	-8	-8	-6	-4	-2	0	1	3	6	8	10	13	14	15	15	17	17	17	-809	23
24	-830	-4	-4	-4	-4	-3	-3	-1	2	3	4	7	8	9	11	12	12	13	13	13	13	15	-811	24
25	-841	-15	-15	-15	-14	-13	-11	-9	-6	-4	-2	2	3	5	9	11	12	13	13	13	13	13	-809	25
26	-881	-35	-35	-35	-34	-33	-30	-27	-22	-17	-9	1	2	5	7	11	14	18	17	19	19	19	-807	26
27	-861	-25	-24	-20	-20	-19	-17	-11	-6	-3	-1	0	3	4	7	12	18	21	22	24	24	24	-802	27
28	-845	-19	-19	-17	-18	-15	-11	-10	-9	-4	-3	-1	2	4	7	15	21	24	25	28	28	28	-798	28
29	-860	-24	-24	-24	-24	-24	-20	-18	-14	-12	-8	-7	-5	-3	1	3	4	5	5	7	8	8	-818	29
30	-837	-11	-11	-11	-11	-11	-10	-8	-5	-3	-1	0	2	4	8	8	9	11	11	13	13	13	-813	30
31	-1188	-363	-285	-221	-195	-160	-88	-28	-18	-9	-3	2	7	11	15	20	23	48	52	58	59	60	-786	31
	-1189	-215	-137	-82	-54	-44	-27	-18	-10	-6	-3	-828	2	5	8	12	14	21	28	42	50	57	-786	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 12 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - SEPTEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-82	-12	-19	-51	-23	-39	38	9	1	3	4	-4	2	0	4	7	8	12	9	10	8	-1	-1	2
02	4	8	8	15	16	14	11	10	8	8	7	1	5	4	9	11	10	13	11	11	7	8		
03																								
04																								
05																								
06																								
07																								
08																								
09																								
10																								
11																								
12	4	-1	-3	-7	-8	-4	4	11	5	-3	-2	-1	16	13	11	16	13	18	-20	-11	-64	9	38	10
13	-2	-13	0	-10	13	14	8	7	24	8	2	-21	-34	0	7	-6	-1	-34	-13	-3	0	-111	-31	77
14	11	-116	-22	-64	-61	-40	-37	-12	23	-11	-10	-33	-19	-42	-48	-9	38	-21	-11	15	11	10	4	0
15	-3	0	15	19	20	2	-9	2	2	-1	-2	-22	-38	-17	-7	1	5	-7	-27	-21	-14	-11	-9	-9
16	8	10	11	17	14	15	17	22	14	24	44	41	29	19	12	16	-15	-13	-10	-32	-27	6	35	21
17	-25	-25	-4	-7	-3	2	-5	-5	8	12	17	23	24	24	11	28	38	-11	-85	-177	-134	-120	-107	-85
18	-62	-75	-111	-116	-101	-88	-31	-25	-58	-45	-148	-118	-64	18	37	-60	-16	-38	-84	-83	-98	-36	-38	-83
19	-99	-39	-28	-28	-10	11	11	17	-18	-10	6	19	13	17	-14	-11	-2	2	8	-3	-3	-2	4	9
20	-15	-10	-7	-7	-5	7	10	2	-8	-9	-5	-4	-8	-6	1	4	0	-6	-2	2				
21																								
22																								
23	16	10	7	10	4	0	2	8	8	15	15	10	18	2	7	5	-4	-10	-7	-6	-5	0	8	10
24	5	13	11	1	6	2	-2	-2	4	2	2	5	2	3	3	7	1	-5	-11	-18	-23	-28	-28	-23
25	-28	-30	-48	-44	-51	-51	-42	-41	-44	-37	-42	-44	-42	-23	-31	-24	-22	-27	-15	-7	-7	-4	7	8
26	8	24	10	18	-2	-8	-6	-8	-15	-15	-12	-4	-6	-24	-23	-21	-11	-8	-12	-13	-8	0	1	4
27	12	10	-11	-8	-5	-14	-7	-4	-7	-12	-23	-27	-28	-12	-8	-14	-19	-6	-5	-7	-6	-4	1	4
28	2	5	7	5	2	2	1	0	2	3	5	8	10	12	12	13	9	8	5	3	3	1	0	3
29	1	0	5	1	-7	-13	-19	-12	-10	-10	-12	-10	-2	5	10	8	5	8	-4	-4	-5	-8	-7	-7
30	2	0	0	0	4	4	-2	-6	-6	-8	-8	-4	4	3	-2	4	2	2	-2	-5	-4	-3	-5	-3
	1	0	2	-1	0	1	0	0	0	-3	0	-3	1	4	3	5	3	-4	-5	-5	-5	-2	0	3

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-1014	-183	-164	-123	-107	-82	-57	-36	-14	-4	1	3	5	7	9	12	15	38	45	52	53	54	-777	01
02	-838	-7	-7	-7	-5	-3	1	3	6	8	9	10	11	11	13	15	16	17	17	19	19	19	-812	02
03																								03
04																								04
05																								05
06																								06
07																								07
08																								08
09																								09
10																								10
11																								11
12	-943	-112	-112	-104	-90	-67	-25	-12	-8	-3	0	4	8	12	18	22	32	41	45	52	52	54	-777	12
13	-1247	-388	-302	-196	-146	-125	-78	-39	-20	-11	-3	1	5	8	13	22	31	77	82	88	89	90	-740	13
14	-1238	-380	-338	-235	-181	-132	-78	-56	-40	-33	-24	-13	-6	4	11	21	31	48	52	59	61	64	-767	14
15	-880	-49	-49	-46	-42	-38	-30	-23	-16	-11	-7	-4	-1	3	7	15	19	22	23	26	27	27	-802	15
16	-877	-48	-48	-44	-42	-38	-31	-20	-4	9	12	15	18	21	27	35	42	45	48	52	53	53	-778	16
17	-1280	-458	-365	-273	-240	-214	-158	-125	-84	-26	-8	-2	5	13	20	28	34	38	40	44	44	45	-786	17
18	-1294	-483	-357	-257	-213	-192	-161	-139	-109	-90	-74	-63	-48	-39	-26	-13	15	52	61	68	67	68	-763	18
19	-978	-148	-143	-130	-114	-100	-55	-28	-18	-10	-5	0	4	8	11	16	21	24	26	29	30	30	-801	19
20	-850	-19	-19	-19	-18	-16	-13	-11	-8	-6	-5	-4	-2	1	3	8	10	12	13	18	18	18	-815	20
21																								21
22																								22
23	-847	-16	-16	-16	-15	-13	-9	-6	-3	1	4	6	8	9	12	15	17	18	18	18	18	18	-810	23
24	-882	-31	-31	-31	-31	-30	-28	-25	-16	-4	0	2	3	5	8	8	12	13	14	16	16	16	-815	24
25	-880	-58	-58	-58	-58	-56	-51	-48	-45	-41	-38	-30	-24	-18	-9	-2	5	9	10	11	13	14	-817	25
26	-857	-28	-28	-28	-28	-28	-23	-20	-14	-11	-9	-7	-5	0	6	14	19	24	28	28	29	30	-801	26
27	-863	-32	-32	-32	-32	-31	-26	-24	-17	-11	-8	-7	-6	-5	-1	6	11	15	16	17	17	17	-814	27
28	-835	-4	-4	-4	-2	-1	0	1	2	3	4	5	8	8	10	12	13	14	15	16	16	16	-815	28
29	-853	-22	-22	-22	-21	-20	-16	-11	-10	-8	-6	-4	-1	3	5	8	10	12	13	14	15	16	-815	29
30	-840	-8	-8	-8	-8	-8	-8	-7	-5	-3	-2	-1	1	3	4	5	6	8	7	9	9	11	-819	30
	-1294	-397	-250	-173	-142	-113	-85	-38	-18	-8	-4	-831	3	6	10	15	22	33	42	80	83	88	-740	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 13 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - OCTOBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-3	2	4	3	7	9	10	9	3	3	0	-4	-2	-4	-4	-4	-2	-3	-2	-7	-13	-11	-24	-17
02	-16	-14	-13	-12	-11	-5	-3	-2	0	-2	-2	-3	-3	-3	0	1	5	6	9	10	11	10	8	6
03	5	3	4	8	8	9	11	12	12	8	8	5	5	0	3	7	0	5	8	12	13	15	12	4
04	3	3	2	4	3	1	7	9	11	5	-2	-3	-4	-6	-5	-2	2	3	-5	-3	-4	1	5	4
05	-4	-10	-10	-7	-9	-18	-13	-2	10	-22	4	14	11	10	4	1	2	2	4	8	9	11	12	9
06	10	5	-3	-2	-5	-4	-4	-3	-1	0	1	2	0	-7	-18	-12	-10	-6	2	-1	-9	-15	-26	-22
07	-5	2	-2	-8	-10	-11	-5	4	5	7	9	9	10	8	3	-1	-4	-8	-8	-2	3	8	9	9
08	8	6	-1	-6	-7	-7	-4	-6	-8	-1	-5	-4	3	1	-2	-8	-10	-14	-17	-18	-16	-12	-14	-12
09																								
10	16	11	8	8	6	-2	-5	-5	-8	-12	-12	-12	-1	2	-3	-16	-19	-12	-9	-15	-11	-16	-6	0
11	3	0	-3	-5	-5	-9	-10	-12	-12	-12	-21	0	2	7	7	7	0	-2	-11	-8	-8	-11	-12	1
12	-5	-3	2	8	11	11	6	6	2	5	5	5	12	11	12	11	10	8	6	3	-3	-9	-12	-11
13	4	3	7	8	12	10	10	-1	-3	-15	-4	-8	-1	-5	0	2	-1	-1	2	0	-6	-4	-1	2
14	10	10	12	15	11	10	2	5	5	5	2	5	5	5	7	8	22	11	9	0	6	3	5	-4
15	-3	1	5	-5	-3	2	5	5	0	0	0	-3	0	-9	-14	-10	-3	-10	-10	-27	-23	-14	-5	-15
16	-16	-12	-5	-5	-3	0	-5	-10	-12	-15	-18	-15	-12	-10	-6	-5	-4	-4	3	2	-2	5	0	-1
17	-5	-5	-4	2	5	5	5	7	10	7	5	2	1	-4	-3	-1	-1	-1	-1	0	-6	1	1	2
18	11	9	6	11	11	1	3	6	6	9	8	5	5	5	-1	-1	-1	-1	5	9	6	7	5	-1
19	-4	-7	-9	-12	-10	-12	-11	-6	-4	-3	4	8	8	2	-2	1	4	1	8	9	10	11	12	8
20	10	8	5	1	4	4	4	8	8	10	5	3	3	-6	-13	-20	-11	-11	-13	-7	-3	0	2	2
21	-3	-5	-1	-1	-1	-1	-1	-1	1	4	8	9	5	2	-1	-5	-13	-13	-18	-17	-10	-11	-3	5
22	2	-4	-7	-7	-7	-11	-14	-14	-10	-2	4	4	1	-7	-10	-11	-13	-13	-10	-6	-3	-1	-1	2
23	3	5	0	-3	-4	-10	-9	-13	-28	-41	-30	1	15	25	9	8	1	3	-3	1	8	10	10	12
24	8	9	6	2	-3	-1	-2	-2	1	5	8	9	10	8	8	5	1	-4	-4	-1	-3	-2	-1	-3
25	1	7	7	3	-3	-8	-6	-6	-4	-4	0	2	5	10	5	-3	-1	-3	-3	-4	-4	-4	-5	-7
26	0	6	6	3	2	-3	-5	-9	-12	-9	-5	-1	6	8	8	11	8	0	-2	-5	-2	2	0	3
27	2	-4	1	3	2	1	-2	-2	-8	-13	-10	-5	-5	-3	8	5	3	-3	2	4	-1	1	1	7
28																								
29	-12	-8	-5	-6	-8	-5	-7	-9	-11	-11	-11	-10	-7	-6	-7	-4	0	-3	-7	-7	-8	-10	-12	-14
30	-15	-13	-8	-10	-6	0	0	0	-2	-5	-5	-5	-4	-6	-4	2	5	9	10	8	5	4	2	2
31	2	2	5	7	9	8	12	15	8	-1	0	0	7	5	1	3	3	8	7	8	10	9	7	4
	3	3	2	3	-1	-1	-1	0	0	0	0	2	4	2	0	0	0	0	0	-1	-1	1	3	3

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-857	-29	-28	-28	-28	-26	-19	-12	-5	-3	-3	-2	1	3	5	8	9	10	11	12	12	13	-815	01
02	-844	-18	-18	-18	-18	-18	-13	-12	-8	-3	-2	-1	0	5	9	10	10	11	11	12	13	13	-815	02
03	-830	-2	-2	-1	0	0	1	2	4	5	6	7	9	10	12	14	15	17	17	19	19	20	-808	03
04	-839	-11	-11	-11	-9	-8	-8	-4	-3	-1	1	2	4	5	6	9	10	11	12	13	14	14	-814	04
05	-859	-31	-31	-30	-28	-25	-20	-15	-9	-5	1	3	6	9	11	13	14	17	21	28	28	30	-798	05
06	-858	-30	-30	-30	-29	-27	-23	-19	-13	-7	-4	-3	-1	0	1	4	8	11	11	13	13	13	-815	06
07	-841	-13	-13	-12	-12	-12	-11	-9	-5	-3	0	2	5	7	9	10	10	11	11	11	11	12	-815	07
08	-849	-21	-21	-21	-21	-20	-18	-16	-13	-11	-9	-7	-5	-3	0	3	8	9	10	10	10	11	-817	08
09																								09
10	-847	-19	-19	-19	-19	-19	-18	-16	-13	-11	-8	-5	-3	-1	5	9	12	16	18	20	20	20	-808	10
11	-855	-27	-27	-26	-24	-21	-18	-16	-12	-10	-7	-5	-3	0	3	6	9	10	11	11	11	11	-817	11
12	-847	-19	-19	-19	-18	-17	-13	-9	-3	2	5	8	8	10	11	12	14	14	15	17	18	19	-809	12
13	-847	-19	-19	-18	-18	-15	-12	-9	-5	-2	-1	0	2	4	7	9	11	13	14	18	18	19	-809	13
14	-834	-8	-8	-8	-8	-5	-1	0	2	3	5	7	8	10	11	14	18	22	25	29	30	30	-798	14
15	-855	-27	-27	-27	-27	-27	-25	-20	-13	-8	-5	-2	-1	0	1	3	4	5	8	10	10	10	-818	15
16	-847	-19	-19	-19	-19	-19	-18	-17	-14	-11	-8	-5	-3	-1	0	5	8	8	8	11	11	11	-817	16
17	-834	-6	-6	-6	-6	-6	-6	-6	-4	-2	0	1	2	3	5	7	8	9	10	10	10	10	-818	17
18	-829	-1	-1	-1	-1	-1	-1	-1	-1	4	4	5	5	7	8	9	13	14	14	18	20	21	22	-808	18
19	-842	-14	-14	-14	-14	-14	-13	-11	-8	-5	-1	1	3	6	8	12	12	13	13	13	13	13	-815	19
20	-848	-20	-20	-20	-20	-20	-17	-13	-9	-2	3	3	4	4	7	10	11	12	12	12	12	12	-818	20
21	-848	-20	-20	-20	-20	-19	-18	-15	-7	-6	-4	-3	-2	0	3	6	7	8	9	9	9	9	-819	21
22	-842	-14	-14	-14	-14	-14	-14	-14	-12	-10	-8	-8	-2	-1	1	4	5	8	9	10	10	10	-818	22
23	-872	-44	-44	-44	-44	-42	-34	-24	-10	-5	-1	1	3	7	10	12	22	26	28	33	34	35	-793	23
24	-835	-7	-6	-8	-8	-5	-5	-3	-2	-1	-1	1	3	7	8	10	11	12	13	13	13	13	-815	24
25	-840	-12	-12	-12	-11	-11	-9	-6	-5	-3	-2	-1	0	1	4	7	8	9	10	11	13	14	-814	25
26	-840	-12	-12	-12	-12	-12	-11	-10	-6	-4	-1	1	2	4	6	8	10	10	11	11	12	14	-813	26
27	-847	-19	-19	-19	-18	-16	-12	-10	-5	-2	0	1	2	5	6	7	11	12	12	16	16	16	-812	27
28																								28
29	-845	-17	-17	-17	-17	-16	-13	-12	-11	-10	-8	-7	-6	-5	-4	-3	-1	0	0	2	2	2	-826	29
30	-848	-18	-18	-17	-17	-18	-13	-11	-7	-5	-4	-1	0	2	5	8	10	10	11	11	11	12	-815	30
31	-830	-2	-2	-2	-1	-1	0	1	3	4	5	7	8	8	10	11	14	16	16	18	18	19	-809	31
	-872	-44	-40	-28	-21	-17	-13	-11	-8	-3	-1	-829	4	5	8	10	12	14	18	28	29	32	-793	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 14 of 15).

Path: CAPE CRACROFT to CAPE VANDERBILT - NOVEMBER 1987

RELATIVE HOURLY MEDIAN (dB)

DAY	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	-1	-1	-2	1	3	4	5	5	3	3	1	-1	-3	-4	-4	-3	-1	2	4	4	6	4	2	0
02	-1	-3	-4	-2	-2	0	3	4	6	5	4	2	0	-3	-3	-5	-3	1	4	5	6	6	6	5
03	2	-1	-4	-5	-4	-2	1	2	4	5	4	2	0	-5	-8	-9	-9	-7	-4	2	3	5	4	2
04	-2	-4	-7	-10	-10	-10	-7	-4	-1	3	2	1	-1	-4	-7	-9	-11	-9	-7	-4	0	2	3	3
05																								
06	18	12	-2	-3	5	-1	0	-6	8	7	7	11	-2	-11	-4	-3	-6	-11	-11	-8	-2	5	8	11
07	11	10	6	0	-7	-10	-10	-7	-5	-4	0	5	7	7	5	3	2	1	-3	-2	2	2	5	4
08	9	9	7	3	0	-3	-4	-4	-2	2	5	7	7	7	6	2	0	-3	-5	-5	-3	0	2	5
09	-1	-18	-15	-21	-20	-13	-9	-1	-1	-6	0	4	8	7	3	-7	-4	-2	-1	-4	-1	-4	-1	3
10	7	5	7	6	2	2	-1	-3	-2	3	2	2	4	5	3	1	-1	-3	-6	-7	-8	-9	-7	-7
11	-3	-3	-2	-1	-1	-3	-3	-4	-5	-5	-3	-1	1	3	4	5	5	3	0	-1	-1	-1	-1	0
12	1	3	4	4	4	3	0	-1	-2	-2	-1	0	4	6	7	6	7	6	4	1	-2	-2	-4	-4
13	-2	-1	1	0	1	3	0	0	-2	-2	-1	1	1	4	4	5	1	3	3	1	-1	-1	-1	0
14	-3	-3	0	0	2	2	1	2	0	0	0	-1	-1	0	0	0	1	4	3	3	3	1	1	0
15	0	0	2	1	3	3	3	4	2	2	0	0	-1	-2	-1	0	0	2	3	3	1	0	-2	-4
16	-5	-6	-4	-4	-2	1	1	1	1	-1	-1	-1	-3	-3	-3	-1	1	2	3	7	5	6	15	-23
17	0	-14	-18	-8	-4	-1	-5	4	2	7	3	1	-1	5	0	-1	-1	-3	-4	3	4	3	-3	-2
18	-10	-11	-19	-19	-26	-25	-24	-22	-9	-6	-11	-13	-7	-12	-13	-13	-16	-16	-12	-6	-2	-5	-5	-8
19	-13	-15	-25	-26	-17	-22	-18	-18	-17	-11	-8	-11	-13	-14	-20	-23	-20	-20	-13	-11	-8	-8	-1	1
20	-1	-3	-3	-9	-9	-7	-3	-2	1	3	5	5	3	-1	-4	-7	-9	-11	-6	-5	-2	-1	2	3
21	4	-1	-6	-8	-8	-8	-11	-5	-3	0	3	3	3	1	-2	-8	-5	-11	-11	-10	-1	2	6	8
22	3	4	-1	-6	-5	-11	-14	-8	2	1	2	1	-2	-10	-23	-16	-14	-15	-13	-16	-23	-8	-7	-2
23	1	1	-5	-9	-9	-15	-14	-14	-14	-14	-6	-3	-8	-8										
24																								
25																								
26																								
27																								
28																								
29																								
30																								
	0	-1	-2	-2	-2	-1	-1	0	1	2	2	2	1	0	0	-1	-1	0	-1	-1	1	1	2	1

ABSOLUTE or RELATIVE MAX. SIGNAL STRENGTH (dBm or dB) FOR A TIME PROBABILITY (%) of:

DAY	MIN	.01	.1	.5	1	2	5	10	20	30	40	50	60	70	80	90	95	98	99	99.90	99.95	99.99	MAX	DAY
01	-831	-6	-5	-4	-4	-4	-4	-3	-1	0	1	2	3	4	5	6	7	7	7	7	8	9	-816	01
02	-831	-8	-8	-8	-5	-5	-4	-4	-2	-1	0	2	4	5	6	7	7	8	8	9	9	9	-816	02
03	-836	-11	-11	-11	-11	-11	-9	-8	-5	-4	-1	1	2	3	4	5	5	6	6	8	8	8	-817	03
04	-838	-13	-13	-13	-12	-11	-10	-9	-8	-7	-5	-4	-1	1	2	3	4	4	4	5	5	6	-815	04
05																								05
06	-868	-41	-41	-36	-30	-22	-18	-11	-8	-5	-2	1	4	8	9	14	16	19	20	21	21	24	-800	06
07	-837	-12	-12	-12	-12	-12	-11	-8	-6	-1	1	4	5	5	8	9	10	12	12	13	13	13	-808	07
08	-831	-8	-8	-8	-8	-8	-8	-5	-4	-2	0	2	3	5	6	8	8	9	10	14	14	14	-811	08
09	-858	-33	-33	-32	-31	-28	-23	-17	-11	-6	-4	-3	-1	3	4	7	8	10	12	13	13	13	-812	09
10	-835	-10	-10	-10	-10	-10	-9	-8	-4	-2	1	1	2	5	6	6	7	7	7	11	12	12	-813	10
11	-830	-5	-5	-5	-5	-5	-5	-5	-4	-3	-3	-2	-1	0	2	4	5	6	7	7	7	7	-818	11
12	-831	-8	-8	-8	-8	-8	-5	-4	-2	0	1	2	3	4	5	6	8	9	10	10	10	10	-815	12
13	-827	-2	-2	-2	-2	-2	-2	-2	-1	0	1	2	2	3	3	6	7	7	7	7	10	11	-814	13
14	-830	-5	-5	-5	-5	-3	-1	-1	-1	0	0	0	3	3	4	4	5	5	5	5	5	5	-820	14
15	-831	-6	-6	-6	-6	-5	-5	-3	0	0	1	1	2	2	3	5	6	7	7	7	7	8	-815	15
16	-868	-43	-43	-37	-31	-24	-8	-4	-3	-2	-1	-1	2	3	3	7	11	16	23	30	30	32	-793	16
17	-860	-35	-35	-30	-26	-21	-14	-7	-3	-2	0	1	2	3	4	6	7	9	11	16	17	18	-807	17
18	-851	-26	-26	-26	-26	-26	-26	-24	-20	-17	-15	-11	-8	-7	-7	-4	-3	-2	-1	3	3	3	-822	18
19	-852	-27	-27	-27	-27	-27	-25	-24	-22	-19	-17	-14	-13	-11	-9	-5	1	2	2	2	2	2	-823	19
20	-839	-14	-14	-14	-14	-13	-11	-9	-4	-4	-3	-3	-1	1	2	4	5	5	6	6	6	6	-819	20
21	-839	-14	-14	-14	-14	-13	-11	-9	-8	-4	-3	-2	1	2	5	6	8	9	9	12	12	13	-812	21
22	-853	-28	-28	-28	-28	-27	-23	-20	-14	-12	-10	-5	-2	0	3	4	7	8	8	11	11	12	-813	22
23	-840	-15	-15	-15	-15	-15	-15	-15	-14	-14	-10	-8	-5	-3	-2	2	3	4	4	4	4	5	-817	23
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29																								29
30																								30
	-868	-42	-32	-28	-23	-20	-14	-10	-8	-3	-1	-825	2	3	4	6	8	10	13	21	23	29	-793	

Notes: 1. All data are relative to the Monthly Median, except absolute Min., Max., and Monthly Median Levels
2. Hours are Universal Time
3. Unit = 0.1 dBm (or dB)

Table C3 Summary of monthly propagation statistics (Page 15 of 15).

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